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SELECTIONS
FROM
THE RECORDS
OF THE
GOVERNMENT OF INDIA,
(HOME DEPARTMENT.)

Published by Authority.

No. XXV.

THE ANDAMAN ISLANDS;

WITH

NOTES ON BARREN ISLAND.

CALCUTTA :

PRINTED BY C. E. LEWIS, BAPTIST MISSION PRESS.

1859.

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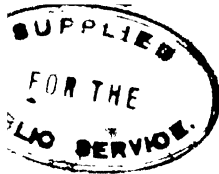
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PREFACE.

<p>Dispatch to the Hon. the Court of Directors (No. 3 of 1858, Home Department, Judicial,) dated 19th January, 1858, an- nouncing the result of the examination of the Andaman Islands, and selection of a penal settlement for Mutineers, Deserters and Rebels,</p> <p>Appointment of the committee of exploration, with instructions for their guidance,</p> <p>Report of the Committee, including the following topics :</p> <p style="padding-left: 2em;">Sailing of the expedition, European Guards, Convict prisoners, Departure from Moulmein, Port Cornwallis, Craggy Island, Sound Island, Andaman Archipelago, Barren Island, Old Harbour, Rutland and Cinque Islands, Labyrinth Islands, Discovery of a new Harbour (Port Mouat), Port Campbell, Middle Strait, Interview Island, Landfall Island and the Cocos, General appearance of Western Coast, Old Harbour, Tribute to Lieutenant Blair, Ethnology of the Andamans, General physical characters of the Great Andaman, Hydrographical features of the same, Absence of sickness,</p> <p>Report on the sickness of the savage brought to Calcutta, ..</p> <p>Order of the Government on the Committee's report, ..</p> <p>Despatch of the Hon'ble Court of Directors on the same subject,</p>	<p>1, 2</p> <p>3, 4</p> <p>4—28</p> <p>28, 29</p> <p>29, 30</p> <p>31—34</p>
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PREFACE HOME DEPT.

OF THE GOVERNMENT OF INDIA.

In the pages of this number of the Selections from the Records of the Government of India is contained nearly, if not quite, all that is known regarding the Andaman Islands.

This singular and interesting group, placed in the track of one of the greatest commercial highways of the world, is chiefly remarkable for its complete isolation from the civilization and progress by which it is surrounded, and for the ill-defined terror with which it still continues to be regarded by the uneducated Mariner.

The sum of our knowledge of the Andamans may be stated in a few words.

They are a collection of islands, surrounded by most dangerous coral reefs, which are gradually forming innumerable islets as each becomes lifted above the surface, and which are peculiarly perilous to vessels in their vicinity, in the violent hurricanes that occasionally sweep across the Bay of Bengal.

They are covered to the water's edge with the dense and luxuriant vegetation of the tropics, and enclose some of the grandest and most picturesque harbours in the world.

They are essentially volcanic in character, hilly on the Eastern Coast, and a collection of flat salt marshes on their Western aspect, where the vegetation is less luxuriant and the hills gradually subside into small hummocks.

They are extremely deficient in animal life, and the birds inhabiting them are comparatively few ; but the reefs and bays abound in shell and other fish.

The most singular feature connected with them is, however, the paradoxical race by which they are scantily peopled.

It is impossible to imagine any human beings to be lower in the scale of civilization than are the Andaman savages. Entirely destitute of clothing, utterly ignorant of agriculture, living in the most primitive and rudest possible form of habitations, their only care seems to be the supply of their daily food.

Their inhospitality and implacable hostility to strangers, with their reputed cannibalism, have caused them to be regarded with terror and aversion by all who have approached their shores.

The little that is known of their manners and customs proves them to be without religion or government, and that they live in perpetual dread of the contact of any other race.

Their origin is a mystery which will probably never be solved, as the traditions of so absolutely barbarous a race, if they have any, are not likely to throw light upon such a question.

The earliest authentic account of them is that of the two Muhammedan travellers, which has been so often quoted. It is subjoined, as extracted from Pemberton's General Collection of Voyages and Travels.

"Beyond these two islands lies the sea of Andaman: the people on this coast eat human flesh quite raw; their complexion is black, their hair frizzled, their countenance and eyes frightful, their feet are very large, and almost a cubit in length, and they go quite naked. They have no sorts of barks or other vessels; if they had, they would seize and devour all the passengers they could lay hands on. When ships have been kept back by contrary winds, they are often in these seas obliged to drop anchor on this barbarous coast for the sake of water, when they have expended their stock; and upon these occasions they commonly lose some of their men."*

* "It is most certain that, upon a strict enquiry, most of the stories of man-eaters have been found to be fables void of all foundation; but it must be allowed, in regard to our author's account, that what he says has never been disproved; for the very latest accounts we have of the Indies, give these people the same character that he does."

The travels of two Muhammedans through India and China. Pemberton's General Collection of Voyages and Travels, London, 1811, Vol. 7, p. 183.

It is abundantly evident that these travellers did not themselves visit the Andamans, and that their account is borrowed from the tales current in neighbouring countries at the time. The natives of these islands most probably possessed canoes long prior to the period referred to.

The following description of the Andamans and their inhabitants extracted from Hamilton's Account of the East Indies, contains a more specific and apparently trustworthy description of their habits, than that of the Muhammedan Travellers.

"The islands opposite to the Coast of Tenasserim, are the Andamans. They lie about eighty leagues off, and are surrounded by many dangerous banks and rocks; they are all inhabited with cannibals, who are so fearless, that they will swim off to a boat if she approach near the shore, and attack her with their wooden weapons, notwithstanding the superiority of numbers in the boat, and the advantage of massive arms of iron, steel, and fire.

"I knew one Fergusson, who commanded a ship from Fort St. George, bound from Malacca to Bengal in company with another ship, going too near one of the Andaman islands, was driven, by the force of a strong current, on some rocks, and the ship was lost. The other ship was driven through a channel between two of the same islands, and was not able to assist the shipwrecked men, but neither Fergusson nor any of his people were ever more heard of, which gave ground to conjecture that they were all devoured by those savage cannibals.

"I saw one of the natives of those islands at Atcheen, in anno 1694. He was then about forty years of age. The Andamaners had a yearly custom to come to the Nicobar islands, with a great number of small praws, and kill or take prisoners as many of the poor Nicobarians as they could overcome. The Nicobarians again joined their forces, and gave the cannibals battle, when they met with them, and one time defeated them, and gave no quarter to the Andamaners. This man, abovementioned, when a boy of ten or twelve years of age, accompanied his father in the wars, and was taken prisoner, and, his youth recommending him to mercy, they saved his life, and made him a slave. After he continued so three or four years, he was carried to Atcheen to be sold for cloth, knives, and tobacco, which are the commodities most wanting on the Nicobars. The Atcheeners being Muhammedans, this boy's patron bred him up in that religion, and some years after, his master dying gave him his freedom; he having a great desire to see his native country, took a prau, and the months of December, January, and February, being fair weather, and the sea smooth, he ventured to the sea, in order to go to his own country, from the islands of Gomas and Pulley-wey, which lie near Atcheen. Here the southern-most of the

Nicobars may be seen, and so one island may be seen from another from the southern-most of those to Chetty-Andaman, which is the southern-most of the Andamans, which are distant from Atcheen about an hundred leagues. Arriving among his relations, he was made welcome, with great demonstrations of joy to see him alive, whom they expected to have been long dead."

"Having retained his native language, he gave them an account of his adventures; and, as the Andamaners have no notions of a Deity, he acquainted them with the knowledge he had of a God, and would have persuaded his countrymen to learn of him the way to adore God, and to obey his laws, but he could make no converts. When he had staid a month or two, he took leave to be gone again, which they permitted, on condition that he would return. He brought along with him four or five hundred weight of quicksilver, and he said, that some of the Andaman islands abound in that commodity. He had made several trips thither before I saw him, and always brought some quicksilver along with him. Some Muhammedan fakirs would fain have accompanied him in his voyages, but he would never suffer them, because, he said, he could not engage for their safety among his countrymen. When I saw him he was in company with a Seid, whom I carried a passenger to Surat, and from him I had this account of his adventures."*

This account, however, will not bear strict analysis, and is evidently a mixture of fiction and fact, from which it is difficult to extract the truth.

The writings of Blair, and the chapter in Col. Symes's Embassy to Ava, with the extracts from Colebrooke's Journal, are the earliest reliable authorities to which we have access.

The latter published a vocabulary of the language of the Andamaners, which will be found in the Appendix, and which, if correct, would seem to prove the existence of different dialects in the Great Andaman, for not a single word of it was understood by the individual brought to Calcutta in January, 1858.

In the Calcutta Monthly Register for November, 1790, is a brief account of the Andamaners, evidently written by one of the surveying party. It is worthy of reproduction, as the work in which it appeared is scarce and somewhat inaccessible, and as

* Hamilton's Account of the East Indies. Pinkerton's Vol. VIII. pp. 430, 431.

it contains the remarks of an intelligent, trustworthy observer. It fully corroborates the statements of Blair and Colebrooke.

"The Andamans are on the eastern side of the Bay of Bengal, they bear about south half west of Point Negrais, about 130 miles distant. The Great Andaman extends in length nearly, north and south, about two degrees and a quarter of latitude; viz. from 14 to 14-45° north. The Little Andamans are a cluster of Islands, in the latitude of about 10-30° north. The longitude of the Andamans, is about six hours and eight minutes east of London.

"These islands, from their situation and appearance, had long been considered by navigators as possessing no importance; they were, therefore, little known or attended to, by our eastern rulers. Pulo-Penang had been given by the king of Quida to Mr. Light, and by him to the Honorable the East India Company; and a settlement had been recently established there, when the Hon'ble Commodore Cornwallis, with the squadron under his command, arrived in India.

"Shortly after the Commodore's arrival, the harbour of this new settlement, and that of the Great Andaman were minutely and accurately surveyed, by order of the Supreme Government, and the proper officers ordered on that duty; but the particulars of their official reports, or the consequent intentions of Government, have not yet been made public.

"Port Cornwallis is situated on the eastern side of the Great Andaman, and is discovered to be a noble, capacious harbour, with most excellent anchorage, and capable of containing three hundred sail of ships, of the largest size, or greatest burden.

"The face of the country is covered with lofty trees, and thick under-wood; the former affording most excellent timber, either for domestic uses, or ship-building. The soil, however, is excellent; and if we may judge from the experiment made by the gentlemen of the fleet, who cleared a spot of ground, and upon sowing various seeds, found them thrive beyond their expectation, it is capable of bringing all vegetables to as great perfection, as any other part of India can boast.

"From the temperature of the climate, we are led to imagine, that upon a further trial, we shall rather be induced to confirm, than to alter this opinion. During the south-west monsoon, a cool steady breeze, constantly predominates, and at the other part of the year, when the north-east monsoon sets in, the wind is sometimes intensely sharp during the night, but decreases into a gentle sea-breeze during the day. As a convincing proof, however, of the salubrious air, and healthy atmosphere, with which heaven has blessed this hitherto forlorn part of the globe, we need but instance, that out of two hundred men belonging to a ship upon this voyage, towards the close of last year, there was not a single invalid; but on the contrary, several who had left Bengal with troublesome complaints, were completely restored to health, very shortly after their arrival.

"The manner in which these islands were peopled, is a matter of

mere conjecture. We are told, that when the Portuguese had a settlement near Pegne, two of their ships with cargoes of slaves on board, amounting in number of men and women, to 300, were cast away there; and as the inhabitants are of the Coffee caste, it must be allowed, that probability favours this opinion or conjecture. They are a strong, robust set of Coffrees, and in their appearance, and mode of living, resemble much what Cooke describes to us, of the inhabitants of the south-west part of New Zealand. Both men and women go entirely naked; the former armed with bows and arrows, which they employ in shooting fish for their subsistence. In this instance we perceive a want of instinct, which, neither fails the rude inhabitants of New Holland, the simplicity of those of the Sandwich Islands, nor the gloomy uncultivated mind of the Nootka-Sound men; who all employ some kind of a hook and line, for the purpose of catching fish. The women at low-water, wade the mud flats, and search the reefs for cockles, and other shell-fish; and as the tide rises, they retire to their huts, to roast this casual provender. When a supply of fish fails them, they roam into the woods in quest of wild hogs and rats, (the only animals that were perceived in that country) and which they are sometimes fortunate enough to procure, as the bones about their huts testify. These are, however, by no means plenty, and it is to be supposed, from the few that were seen by our people, that they are a *dernier* resort, when the calls of hunger are very pressing.

“So far, we have been able to give a brief account of the origin, and manner of living of these people; who are probably destined by the hand of Providence to come under our protection, and to participate in the blessings of civilization. The shyness they have hitherto shown, and the want of confidence they have betrayed, may easily be accounted for; nor is it to be doubted, but that when once they experience the advantages of commerce, and the benefit of our friendship, our intercourse will be permanent; and that they may be taught to enjoy the fruits, of a well directed industry, and a civilized Government.”*

The inhabitants are dwarf Negrilloes, strong and robust, when their supply of food is abundant, as it was during the time of our visit; intensely black; and possessing most of the physical characters of the true Negro, with the exception of the projection of the heel.

The individual captured at Interview Island was singularly quiet and docile, imitated readily the acts and gestures of those by whom he was surrounded, and never from first to last exhibited the smallest indication of ferocity.

* Calcutta Monthly Register, or, India Repository, November, 1790, pp. 15—17.

The appearance of his countenance as given in the frontispiece was caused by the very strong light in which he was placed to photograph him. His restlessness was so great that it was necessary to take an instantaneous picture.

Subjoined are the measurements of his body, taken according to the English standard, on board the steamer *Pluto*.

<i>Place of the Observation, ...</i>		<i>Year.</i>	<i>Month.</i>	<i>Day.</i>
Steamer <i>Pluto</i> ,		1858.	Jan'y.	26th.
<i>Name.</i>	<i>Object of the Measurement.</i>	<i>ft. in.</i>		
John Andaman, . . <i>Sex.</i> <i>Age.</i> Male. 25 years. <i>Native Country.</i> Andaman Islands.	1. Total height,	4	9½	
	2. Width of the arms horizontally extended,	4	1	
	3. Vertex to the beginning of the hairs on the forehead,	0	4½	
	4. Vertex to the orbit,	0	7½	
	5. Vertex under the nose,	0	9½	
	6. Vertex to the mouth,	0	10½	
	7. Vertex under the chin (the head),	1	5½	
	8. Circumference round the frontal sinuses,	1	8½	
	9. Vertex to the clavicle,	1	2½	
	10. Diameter of the head by the temples,	0	6½	
	11. Antero-posterior diameter of the head,	0	7½	
	12. Interior distance of the eyes,	0	1½	
	13. Exterior distance of the eyes,	0	4½	
	14. Length of the mouth,	0	2½	
	15. Length of the ear,	0	2½	
	16. Length of the hand,	0	6½	
	17. Length of the foot,	0	9	
	18. Breadth of the hand,	0	3	
	19. Breadth of the foot,	0	3½	
	20. From the ground to the middle of the patalla,	1	4½	
	21. Diameter by the acromion apophysis,	1	1½	
	22. Length of the arm from the acromion process,	1	6½	
	23. From the ground to the trochanter,	2	6½	
	24. Circumference round the calf,	0	10½	
	25. Circumference round the knee,	1	0½	
	26. Distance of the malar bones,	0	5½	
	27. Breadth of the nose,	0	1½	

Two of the unfortunate savages killed in our encounter at South Reef Island, whose bodies were brought on board the

Steamer, exhibited the same characteristics as their captured comrade. They were more robust, but of about the same height, and in all respects corresponded with the Negrilloes of Ethnologists.

The photographs taken in Calcutta were sent to Baron Alexander von Humboldt, by whom the individual was declared to belong to the type above mentioned.

Of the vocabulary of the Andaman language published by Colebrooke, and reproduced in this brochure, not a single syllable was intelligible to the savage brought to Calcutta.

Of the Malayan, Burmese, Chinese, and other Eastern tongues he seemed to be equally ignorant, nor did he comprehend a word of the several African dialects spoken by the Seedies in the service of the Peninsular and Oriental Company with whom he was confronted. The most simple terms were employed, such as the expressions signifying fire, water, food, eyes, nose, mouth, head and hand, hunger and thirst: but in vain. He himself applied distinctive terms to all, from which he never varied. They did not correspond with any known written or spoken language, which could be brought to bear upon him.

He unfortunately sickened so rapidly and unexpectedly, as to afford no time to prepare a vocabulary of those terms which he was in the habit of using daily, to designate objects presented to him, and to make known his wants.

His imitative powers were great, he rapidly learnt to dress and wash, and always behaved with propriety and decorum.

He exhibited great tenderness towards, and affection for young infants, whom he caressed with as much gentleness as the most civilized being could have shewn.

When his own photograph was shewn to him, he laughed heartily at it, and called it *Jack*, the name by which he was himself known. He never turned a picture upside down, and always looked behind it to see the remainder of the figure.

His mode of salutation was to take the hand of the person whom he addressed, and to blow upon it, humming a sound like *ooh*, prolonged for some seconds, and uttered in a cooing tone.

With the use of tobacco he was evidently unacquainted, and the first quid given to him by a sailor he swallowed, without apparent nausea or distress of any kind. I would not permit the experiment to be repeated. *

He mounted stairs with a good deal of dread, and an evident feeling of insecurity and wonder.

He had the short, quick, chuckling, joyous laugh of the Negro races, and, when not sick, was always good humoured.

He went to sleep at sunset, and arose at sunrise, with the utmost regularity, and, until he lost his health, never slept during the day.

In mending and making nets, in fastening on the iron barbs of arrows, and in the use of his native adze he was clever and handy. He learnt to holy-stone and wash decks, and always seemed anxious to do something.

As there is undoubtedly occasional communication with the Andamans by Malays and Burmese, it was surprizing that he did not understand a word of Malayan or Burmese, or appear as if he had ever seen such people before.

Of the existence of cannibalism we found not the remotest trace in any form, or in any of the many localities explored.

Since the re-occupation of Port Blair, several of the convicts have been killed by the Andamaners, but in no single instance do the bodies or any part of them appear to have been devoured.

The late Mr. Piddington mentioned to me that, some thirty years since, he was anchored off Landfall Islands, and seeing a large fire on a sandy beach, with a number of savages around, he landed with an armed party, after dusk. The savages fled on his approach, and he found a human body on the fire, too much charred for identification, and apparently undergoing

cremation. It could not have been intended for food, as it was nearly reduced to a cinder, and quite unfitted for a cannibal banquet.

If they ever resort to human flesh, which I very much doubt, it can only be under the pressure of extreme hunger.

The only commercial purpose for which the islands would seem to have been frequented, heretofore, was for the *beche de mer*, or *Holothuria*, abundant on every reef, and for the edible nests, which we found in some of the caves visited.

In most of the canoes captured, we found a considerable quantity of dammer, in some cases made into torches.

With the exception of their bows and arrows, canoes, nets, paddles, a twisted cord which they wear round the waist, nails beaten into thin knife blades, and an adze, we found no manufactured article of any sort.

Their arrows were barbed with iron with much ingenuity, and were truly formidable weapons ; carrying straight, and with considerable force to a distance of forty yards. Beyond this, they were innocuous, and in no single instance did we find them to be poisoned.

In the excavation of their canoes they now use an adze, and do not scoop them out with fire, as appears formerly to have been the case. •

In their villages, which usually enclose an open central space, was invariably one hut, built and roofed in with much more care and attention than the remainder. It was generally richer in pigs' and turtle skulls, was square in form, and was most probably the abode of the head man of the party. In all the instances in which we came in contact with them, there was evidently a local chief whom the rest obeyed, and from whom they obtained their orders to fight or run away. At Craggy Island, the commander brandished a formidable looking spear, and was followed by a henchman, who carried his bows and arrows.

They are evidently a bold, hardy, crafty race, extremely active, possessing many of the qualities of the African type, and susceptible, under the influence of civilization, of becoming an intelligent and an industrious population.

It was my intention to have embodied in this preface a condensed account of such shipwrecks on the Andamans as have occurred of late years, and of which I believed that authentic particulars were procurable.

In this I have been entirely disappointed. No information of any kind is procurable even of the singular wreck of the *Briton* and *Runnymede*, with portions of H. M.'s 50th and 80th Regiments on board. It occurred a few years since, and many of the survivors are probably now alive. It was doubtless officially reported to the Government at the time, yet not a trace of such record can be found. A diligent scrutiny of the newspapers of the time might possibly have exhumed some particulars; but for this I have not the necessary leisure. The place of the wreck on one of the islands of the Archipelago is indicated on the Chart prepared by Lieut. J. A. Heathcote, who accompanied the expedition.

On the same Chart is contained the track pursued by the Committee in their examination of the Coast.

Since the re-occupation of Port Blair as a convict settlement, Ross Island, Chatham Island, and a portion of Viper Island have been cleared and occupied. Great sickness, as might have been expected, has occurred among the convicts and all who lived on the newly cleared grounds. The diseases are apparently identical in character, intensity and mortality, with those which followed the early occupation of Arracan. In the Terai of Bengal and Behar, newly cleared lands are not deemed habitable for a couple of years after they have been prepared for cultivation. The inhabitants of such places invariably sleep on muchaus raised high above the ground.

It is somewhat singular that in the year 1858, the sickness

and mortality among the Bengal and Behar convicts at Akyab, have been nearly as great, and of identically the same type as at Port Blair. Fevers, diarrhoeas, and low forms of ulcer, degenerating into gangrenous sores, committed as great havoc in the old settlement, as they have done in the new.

In some of the sickly years in Arracan, the mortality among sepoy, well paid, well fed, and suffering from none of the depressing agencies which render rebels and mutineers an easy prey to malaria amounted to seventy-five per cent.

Natives of India bear transplantation badly in all circumstances, and, as prisoners, have lost heart and hope, and succumb without a struggle.

In our expedition, the means taken to prevent sickness were to dissolve a grain of quinine in every man's coffee before he started in the morning; to see that each individual had a fit covering for the head; and to prevent any one sleeping on the shore between sunset and sunrise.

The land at Port Blair has been found singularly fertile. Water is tolerably abundant, and I have little doubt that, in a few years, the settlement will be as healthy as Singapore and Penang, and more healthy than Arracan, or our own Sunderbunds.

The savages do not seem to have fraternized with the Sepoys, nor have they hitherto become more amicable than we found them.

The few runaways whom they have spared and treated with kindness, give a singular account of their manners and habits, but their descriptions do not appear to me to be sufficiently trustworthy to be accepted without corroboration. In one instance, they burnt the clothes of the deserter, and shaved his head with a piece of bottle glass. While the men were absent fishing, he was carefully guarded by the women, to prevent his escape. On his return, he represented his captors to be a good humoured race, who had treated him kindly.

To guard against surprize, the exploring parties were always protected by an advanced and flank guard, and the charge of the rear guard to keep open our communication and to prevent our being cut off, was invariably entrusted to a careful officer. The movements of the savages were so stealthy and cautious, and the jungle so dense, that the earliest intimation of their presence was usually an arrow fired at an incautious or exposed member of the party. By never relaxing our precautions, we brought the whole of our party back in safety, and accomplished our perilous task with as little damage to our implacable opponents, as it was possible to inflict, to punish their aggressions upon us.

Of the courage and good conduct of our Naval Guard, and of the European Crew of the *Pluto*, it is impossible to speak in too high terms. They had not been thoroughly trained to act together, and were, therefore, occasionally wanting in discipline. But, we experienced no difficulty in preventing unnecessary bloodshed, and in stopping firing the moment aggression had ceased.

Our expedition was not marred by a single act of wanton cruelty.

The notes of Drs. Playfair and Von Liebig on Barren Island are extremely interesting as throwing light upon the actual state of one of the most singular volcanoes in existence.

This will be found to differ considerably from the pre-existing published accounts, as contained in the writings of the highest authorities on the subject.

The photograph of the cone was taken by Monsieur Mallitte who accompanied the expedition as photographer.

The drawings and plans of the island are by Dr. Playfair.

FRED. J. MOUAT,

Inspector General of Jails,

late President, Andaman Committee

Fort William, May 1st, 1859.

THE
ANDAMAN ISLANDS.

HOME DEPARTMENT.

JUDICIAL.

No. 3 of 1858.

(19th January.)

To

THE HONORABLE THE COURT OF DIRECTORS
OF THE EAST INDIA COMPANY.

HON'BLE SIRs,

WITH advertence to the 6th paragraph of your Honorable Court's Despatch No. 24 of 1857, dated the 8th April, and to our letter No. 2 of 1858, dated the 7th January, we have the honor to state for your Honorable Court's information, that on the 20th November last we appointed a Committee, composed of Dr. F. J. Mouat, the Inspector of Jails in the Lower Provinces, Assistant Surgeon G. R. Playfair, M. D. and Lieutenant J. A. Heathcote of the Indian Navy, to examine the Andaman Group of Islands, with a view to the selection of a site for the establishment of a Penal Settlement for the reception, in the first instance, of Mutineers, Deserters, and Rebels, sentenced to imprisonment in banishment, and eventually for the reception of all Convicts under sentence of transportation whom for any reason it may not be thought expedient to send to the Straits Settlements or to the Tenasserim Provinces.

2. We enclose a copy of the instructions which we gave the Committee.

3. The Committee left Calcutta on the 23rd November last, in the Hon'ble Company's Steam Vessel *Semiramis* for Moulmein, whence they proceeded in the *Pluto*, to the Andamans, arriving there on the 11th December following. They have now returned to Calcutta, and we have the honor to forward for your Hon'ble Court's information, a copy of the able, useful, and interesting report which they have submitted to us.

4. In accordance with the recommendation of the Committee, we have selected the "Old Harbour," henceforward to be distinguished by the name of "Port Blair," as the locality of the proposed Penal Settlement; and we have directed Captain H. Man, the Executive Engineer and Superintendent of Convicts at Moulmein, to proceed at once to the spot with all the means necessary for clearing a site, and otherwise preparing for the reception of the Convicts.

5. Captain Man has been instructed, as a preliminary step, to re-take formal possession of the Andaman Group, with the view of avoiding any doubt or difficulty that may arise from the circumstance of their having been deserted in 1796.

6. A copy of our proceedings on the report of the Andaman Committee is also enclosed for your Hon'ble Court's information.

We have the honor to be,

HON'BLE SIRS,

Your most faithful humble Servants,

(Signed) CANNING.

„ J. DORIN.

„ J. LOW.

„ B. PEACOCK.

FORT WILLIAM, }
The 19th January, 1858. }

No. 2436.

FROM

C. BEADON, ESQUIRE,
Secretary to the Government of India.

TO

F. J. MOUAT, ESQUIRE, M. D.,
G. R. PLAYFAIR, ESQUIRE, M. D.,
LIEUT. J. A. HEATHCOTE, I. N. ,

Dated the 20th November, 1857.

GENTLEMEN,

HOME DEPT. I am directed to inform you that the Right Honorable the Governor General in Council has been pleased to appoint you to be a Committee to examine the shores of the Andaman Group of Islands, and select the best site which may be found there for the establishment of a penal settlement.

2. The first requisites of such a settlement are a secure and accessible harbour, abundance of wood and water, a healthy situation for a jail and convict lines, and considerable extent of country in the vicinity fit for clearance and cultivation. It is desirable also that the Jail should, if possible, be located on an islet, separated from the main island by a channel affording safe anchorage for vessels of light draught, and too wide for any convict to attempt to cross by swimming. By this means it would be more easy to maintain an entire separation between convicts kept in close confinement and those to whom some degree of liberty is allowed.

3. Dr. Mouat will be President of the Committee, and in general charge of the expedition. His attention will be more particularly given to matters connected with the enquiry, with which his duties as Inspector of Jails in Bengal have made him familiar. The medical and scientific duties of the expedition will devolve upon Dr. Playfair. And those connected with the survey of the coast and the harbours will be attended to by Lieutenant Heathcote. Lieutenant Heathcote will understand that a minute or detailed survey is not required: it will be sufficient to ascertain the general features of the channels or anchorages. But the Governor General in Council does not doubt that the Members of the Committee will communicate freely with each other, and be able to submit the result of their investigations in a combined report.

4. The Committee are to proceed to Moulmein on the Hon'ble Company's Steam Frigate *Seniramis*, which will leave Calcutta on Monday next, the 23rd instant. At Moulmein the Hon'ble Company's Steam Vessel *Pluto* will be placed at the disposal of the Committee, and in her they will proceed to the Andamans, taking such course as, under all circumstances, may appear most advisable. Having completed their enquiries, the Committee can either return to Calcutta direct in the *Pluto*, or find their way back in any other way that may seem preferable.

5. The Committee should not separate till their report is complete, and this His Lordship in Council trusts will not be later than the middle of January. The value of the report will be greatly enhanced if it be accompanied by Photographic views of the various sites reported on.

6. The Committee should be accompanied to the Andamans by a small guard of Europeans, which can be furnished from among the men of the Indian Navy by the Senior Naval Officer.

7. All the information in the possession of the Government relating to the Andaman Islands will be placed at the disposal of the Committee.

I have, &c.,
(Signed) C. BEADON,
Secy. to the Govt. of India.

FROM

THE ANDAMAN COMMITTEE,

TO

C. BEADON, ESQUIRE,
Secy. to the Govt. of India,

HOME DEPARTMENT.

Dated Port Andaman, the 1st January, 1858.

SIR,

WE have the honor to acknowledge the receipt of your letter, No. 2436, dated the 20th November, 1857, intimating that the Right Hon'ble the Governor General in Council had been pleased to appoint us to be a Committee to examine the shores of the Andaman group of Islands,

and to select the best site that may be found for the establishment of a Penal Settlement.

2. The requisites for such a settlement were pointed out, and we were directed to proceed on the Honorable Company's Steam Frigate *Semiramis* to Moulmein, where the Steamer *Pluto* was to be placed at our disposal for the purpose of conveying us to the scene of our labours.

3. We accordingly embarked on the *Semiramis* on Monday the 23rd of November, and reached Moulmein on the afternoon of Tuesday the 1st of December, 1857. The *Pluto* was at that time absent, but returned on Friday the 4th, and was prepared for sea with all possible dispatch.

4. To protect our party when engaged in exploring, Captain Campbell, Indian Navy, commanding the *Semiramis*, placed at the disposal of the Committee, an Officer and twenty European Seamen from his Crew.

To enable us to penetrate the dense jungle which was said, and which we found, to cover the Andamans, the Convict Pioneers, Officiating Commissioner of Moulmein, Major A. Fytche, sanctioned the temporary transfer of twelve short term Burmese Convicts accustomed to forests, with a guard of three Convict Peons. Without the aid of these men we could have made no progress in the examination of the coast. Major Fytche also made over to us the boring instrument in store at Moulmein, and Captain Man, the Superintendent of the Convict Establishment, taught the prisoners the use of that important instrument prior to our departure.

5. Thus armed and equipped, we left Moulmein on the morning of Tuesday the 8th of December, and anchored in Port Cornwallis at 8½ A. M. of Friday the 11th of the same month.

6. Our object in first visiting the old settlement was to ascertain by personal examination the causes of its extreme unhealthiness, to guide us in our investigation into the other localities likely to possess sites suitable for a Penal Settlement.

7. We do not deem it necessary to furnish a detailed description of this magnificent harbour, and the Islands enclosed within it. The survey of Lieutenant Blair was found to be generally accurate, and,

with the exception hereinafter noted, the place seems to have undergone no material change since the abandonment of the settlement in 1796, for reasons which are contained in the records of the Government of India.

8. We landed on the North-East corner of Chatham Island, where all that could be found of the old settlement was lying on the beach, in the form of detached fragments of a substantial brick building.

9. The rear wall only was standing, and contained a door and two windows. The remainder of so much of the house as had not been destroyed by the encroachment of the sea, which in this spot must have advanced some 40 or 50 feet, was strewn with large pieces of masonry and brickwork, on the beach. The brickwork, cemented with shell lime was of excellent quality, which was shown by the retention of the form of the arches that had fallen. The masonry had been detached in masses by the vegetation growing in fissures which had probably been caused by the action of the sea. The detached bricks, which were scattered over a space of some 200 yards, had been rounded by the same agency.

10. A small mound, about 100 feet in height, was immediately behind, and to the South West of the building. Rounded fragments of masonry which had probably formed the basement of a pillar were found at the foot of the hill, on the crest of which were layers of small bricks imbedded in the roots of the trees. No inscriptions, wells, or other indications of the existence of a settlement could be found, owing to the perfect impenetrability of the jungle. A few cocoanut trees, palms, and acacias, and a number of larger trees not identified, covered the Island. Two small water courses were seen, one on its Northern, the other on its Western aspect.

11. On its South-Western side is an extensive mud bay, dry in spring tides, with broad belts of mangrove, and low flat country on the opposite shore in the same direction.

12. The only sea breeze that could reach the Island is the North-East wind, and that could have blown over but a small portion of its Northern aspect.

13. It thus appears to have been ill-selected as a site for a settlement, two-thirds of its own shore being fringed with a dense belt of Mangrove, and the prevailing winds during the greater part of the year, at its most unhealthy season, blowing over the swamp surrounding the



engraved by O. M. Little

THE ATLANTIC OCEAN

THE ATLANTIC OCEAN. A. M. LITTLE. ENGRAVED BY O. M. LITTLE. THE ATLANTIC OCEAN. A. M. LITTLE. ENGRAVED BY O. M. LITTLE.

Island. Conditions more certainly calculated to secure the largest measure of unhealthiness, it would be difficult to find.

14. Photographic views were taken of the remains of the settlement, and of some native fishing huts in its immediate vicinity.

15. Of the savages themselves nothing was seen, although huts and other indications of their proximity and recent presence, were found on the main land, in a Bay on the North side of the Port.

16. The results of our intercourse with the Natives will be mentioned in a separate section.

17. On leaving Port Cornwallis we steered to Craggy Island, a few miles to the Southward, for the purpose of ascertaining if it were practicable to mount the Saddle Hill, the highest point of the Islands, in order to obtain some idea of the interior of the Great Andaman.

18. Upon a near examination of the spot, we considered it to be impracticable in the time, and with the means at our disposal—so the project was abandoned. At this point we first came in contact with the inhabitants, as will be mentioned hereinafter.

19. We then proceeded to Sound Island, as the next locality on the East Coast, affording promise of an eligible site.

20. We steamed through Stewart's Sound, and right round the island which is of an irregular quadrilateral form, forming one side of a large land-locked bay, accessible at all seasons to vessels of every class. The island appeared to consist of ridges of high land running through it in all directions, and prolonged in spurs to the points of the bays indenting its margin. It was fringed with belts of mangrove, and surrounded by coral reefs, with occasional fine sandy beaches.

21. Towards the South-Western extremity is a horse shoe shaped harbour, nearly three quarters of a mile in depth and rather more than half a mile across, the shores of which we spent two days in exploring. On the Northern and Eastern aspects it is skirted by coral banks and rocks, but in the rest of its extent, it has good anchorage ground for large ships.

22. The ridge surrounding it rises to a height of about 120 feet, and we found the jungle and underwood much less tangled and dense than on Chatham Island.

23. The ridges also contained small plateaux of level ground, with good drainage, and sufficient in extent to form a very large settlement, with an abundance of clay and coral for building purposes, and a rich soil for cultivation.

24. But, it was deficient in water, appearing to possess only the moisture resulting from surface drainage, without a running rill of even the smallest dimensions in any direction that was examined for a mile and-a-half. Attempts to dig and bore, the latter to a depth of eleven feet, failed to procure water.

25. There was also a deficiency of forest trees fit for building purposes.

26. For these reasons, it does not seem to us to be a desirable place for a settlement of any kind. There was no point from which a photographic view, calculated to show its characters, could be obtained.

27. In addition to local deficiencies and probable sources of disease from the belt of mangrove encircling it in all directions, in attempting to ascertain the existence of a navigable Strait between the Northern and middle Andaman, we discovered an extensive tract of the worst description of Sunderbund, ending in putrid shallows, apparently running towards the interior of the island, and sufficient to poison any place lying within the influence of the winds blowing over it.

28. The ascertainment of the existence of a passage, which had been left undetermined by Lieutenant Blair, was a question of some interest—as in the event of its furnishing a safe and ready access to Interview Island from the Eastern Coast, it might have led to the occupation of that great island, had it contained the other conditions essential to the formation of a settlement. The extent of the pestilential Sunderbund was not ascertained; but that no navigable passage existed and that any settlement in its vicinity would be undesirable, were fairly established.

29. Having finished this work, we again steered to the Southward, towards the Andaman Archipelago, a large cluster of Islands on the Eastern Coast.

30. The main land was bold, with high undulating hills, and more free from mangrove than any portion of the islands yet seen by us.

31. We passed round two sides of Long Island to the bay lying between it and the shore of the Great Andaman, but as no indications



of running streams were seen, as the island itself was low, and as the opposite shore was skirted with a thick belt of mangrove, we did not consider it worth while to waste any time in landing to explore a place so obviously unsuitable.

32. The remaining islands of the Archipelago we did not look at. Most of them were low, the absence of safe ports was patent, and the navigation too dangerous and too intricate to permit of their being occupied as a penal settlement, according to the instructions laid down for our guidance. Even had some of the larger islands proved eligible in themselves, they would not have allowed of sufficient subsequent extension to permit of their occupation on an extended scale, with reference to the amount of culturable land near the settlement.

33. Being within a few miles of Barren Island at this point, and considering that it was desirable to neutralize any possible bad effects from the very unwholesome places we had recently examined, we resolved to visit and explore that interesting Volcano.

34. We accordingly steered for it on the evening of the 17th, and reached it at 4 on the morning of the 18th. We spent a few hours in examining it and some of our party ascended the cone, and saw the crater, which is still smouldering. It has apparently changed in some of its physical features since it was last described, but as these are foreign to the object of our mission, they are recorded in a separate report by Dr. Playfair.

35. The only fact of sufficient political importance to place on record regarding it, is, that it contains little Sulphur, and that little too inaccessible to be worked with advantage.

36. We returned to the Andamans on the same evening, so that the expedition cost only an expenditure of a few hours of time.

37. On the morning of the 19th of December we anchored abreast of Chatham Island in Old Harbour, the site of Blair's first settlement, and as its original occupation had proved continuously healthy, we devoted four days to a very minute and careful exploration of the islands in and at the mouth of the harbour, and of the adjacent main land.

38. The minute and excellent survey of Lieutenant Blair made in 1789, we found to be a most useful and trustworthy guide to the

chief physical features of the place, which can have undergone no material change in the long interval which has elapsed.

39. Nearly every trace of the original settlement on Chatham Island has been entirely effaced. A few bricks and tiles, and a rough stone jetty were the only relics of its former occupation. The Island is small—about 600 yards in length by 150 in breadth, with undulating ground, and a good soil covered with vegetation, in which are a few large forest trees. There was no indication of fresh water anywhere, but, on boring near the foot of a mound at the North end of the islet, it was found in a clay bed at the depth of twelve feet, and it instantly rose to within five feet of the surface of the artesian well.

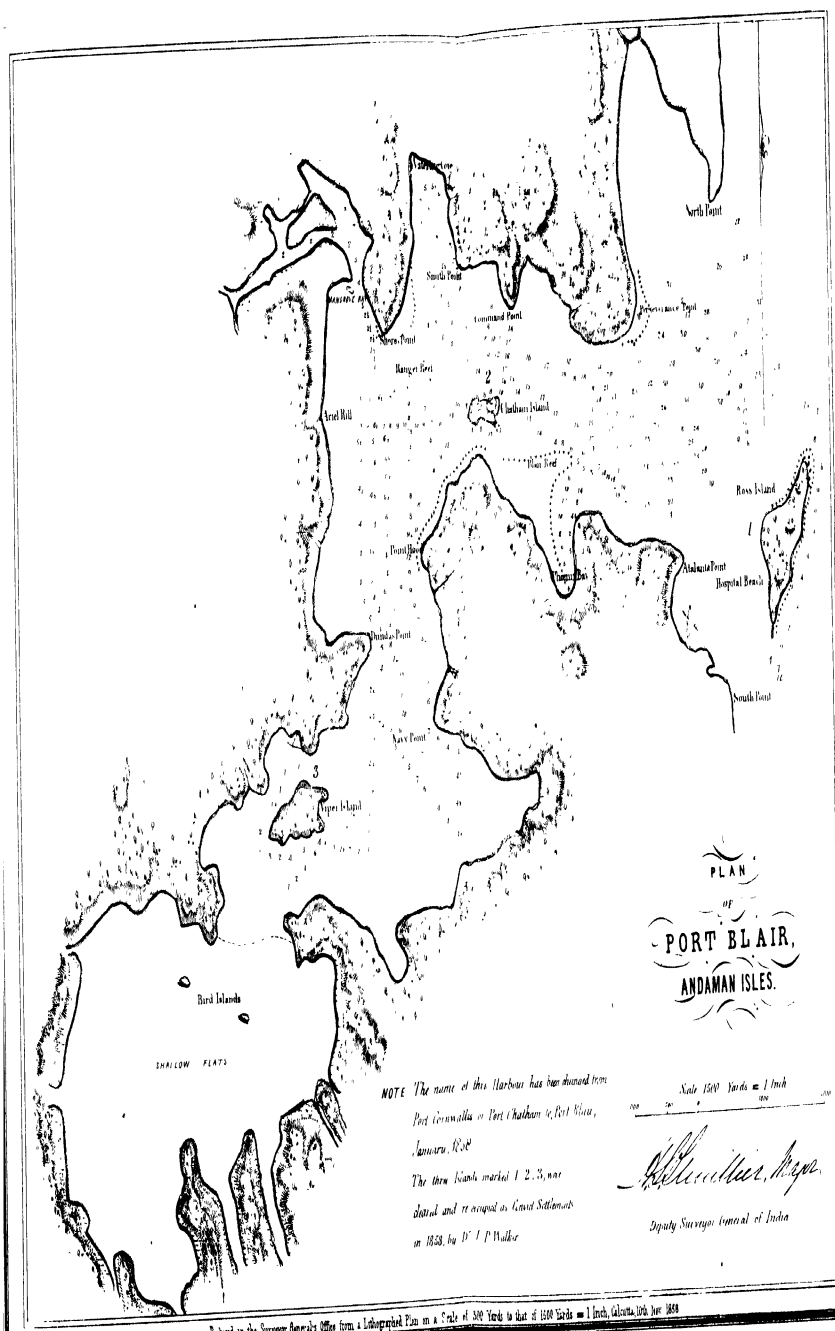
40. The small strait intervening between the islet and the southern shore of the harbour is shallow, with a rocky bottom, being a continuation of Blair's reef. The water evidently came, therefore, from that side, where it was subsequently discovered in abundance.

41. The North shore is high, rising abruptly nearly 300 feet, with ledges of cultivable land on its southern aspect. The ridges are formed of sandstone, which was found to contain several water-courses, two of which are mentioned by Blair, and to abound in bamboo, cane, rattan, and a sufficiency of large forest trees for building purposes. Good clay for bricks is abundant, and the supply of sandstone for building inexhaustible, for piers, jetties, the metalling of roads, and any other purpose that may be needed. The coral reefs in the more exposed bays would furnish an unlimited stock of fine lime. Further, limestone of the finest quality is procurable on a promontory about a day's sail from Old Harbour, and a few miles to the North of Long Island. The luxuriance of the vegetation, and its great variety may be assumed to be good proof of the fertility of the soil, especially when brought under regular cultivation.

42. The rocks bordering it abound in oysters and other shell-fish, and the harbour itself, being quite open to the East with a tidal flux and reflux, will doubtless prove a rich fishery.

43. The belt of mangrove bordering this side of the port is not very extended, and could scarcely prove a source of disease to any settlement on the southern and western slopes of the hills. They could, moreover, be cleared away without much difficulty.

44. The land at the western end of the bay is also elevated, sup-



plied with fresh water, and seems to be very much of the same character as that of the northern side.

45. Mangrove Bay we did not examine, as, although it probably leads to a Sunderbund, its position in the North-West corner of the harbour is such as to remove it from the course of the prevailing monsoons, and thus to prevent its becoming a source of unhealthiness to the settlement.

46. If bunded so as to shut out the sea, the extreme rise of which is only seven feet, it can doubtless be reclaimed hereafter, and form good rice land, as at Kyouk Phyoo in the Island of Ramree on the coast of Aracan, which has been rendered both healthy and productive, by an embankment of the nature referred to.

47. The land on the southern aspect of the harbour is lower, even more plentifully supplied with water, and from the character of its dense and multifarious vegetation seems to possess a richer and more promising soil. Among the plants identified were a few cocoanut trees, a thatching palm, some varieties of acacia, tree ferns, the bamboo, the rattan, the cane, and others not necessary to record.

48. In many places, particularly where directly exposed to the sea, there is little or no mangrove skirting it.

49. Ross Island at the entrance of the harbour is $\frac{3}{4}$ of a mile long by $\frac{1}{2}$ mile at its broadest part, is low on the western side, gradually rising to an elevation of about 60 feet on its eastern shore, the rock being sandstone. It acts as a breakwater against the North-East Monsoon, and appears from the hospital having been placed there formerly, to have been used as a sanitarium, for which purpose it seems to us to be well adapted. It is bounded by smooth rocks on its sea face, and contains large forest trees, with vigorous and not very rank under vegetation.

50. We found no fresh water on it, and no vestige of its former occupation; but, from the character of the adjacent land and the shallowness of the Bay separating it from the main land to the southward, we have no doubt that boring would have found it. It is more than probable that when the early hospital existed on it, the supply of water was obtained from a well, but on this and many other points of interest and importance, the précis furnished to the Committee affords no information whatever. The original report of Lieutenant Blair most probably contains it.

51. The Committee are not aware of any physical indications by which the healthiness of an uncleared locality can be absolutely predicated ; but, so far as ordinary experience can be accepted as a safe guide, Old Harbour seems to afford fair promise of proving as healthy as any locality similarly situated in a tropical region.

52. Its means of drainage are ample and most efficient ; the removal of all effete matter beyond the reach of causing mischief will be easy ; and any possible existent tracts of marsh land, do not lie in the direction of the prevailing winds.

53. We are, therefore, of opinion that, as a small portion of it, Chatham Island, proved continuously healthy during the time it was occupied sixty years since ; with ordinary care in the construction of buildings, and strict attention to conservancy arrangements, a more extended and permanent settlement will prove equally salubrious.

54. Making due allowance for its higher latitude, from its similarity to certain parts of the East Coast of Ceylon, and from its local peculiarities, we are of opinion that economic plants, such as the coconut, the bread fruit tree, the plaintain, the sugar cane, and the date palm, would certainly flourish here. Of useful plants, the bamboo, rattan, thatching palms, and most of the timber trees that bear exposure to sea air, would also grow well with a little care in cultivation.

55. It is not improbable that many tropical fruit trees of great value, such as the Mangostein, the Lecchee, the Loquat, and others could also be naturalized without much difficulty.

56. Grasses would also grow for pasturage, but they would probably be somewhat rank and coarse.

57. From Old Harbour we steered again to the Southward to Rutland and Cinque Islands. Rutland Island. The coast was undulating, hilly, without mangrove, and ended in a bold bluff at the entrance to Macpherson's Strait. The southern face of the Great Andaman was fringed with mangrove ; but it was not deep, and could not in any way affect the health of a settlement at Old Harbour.

58. We devoted two days to sailing round Rutland Island, and the examination of a part of its eastern shore, as well as of one of the Cinque Islands in its vicinity. The former is a fine extensive tract of land, hilly at its northern end, well wooded, and flatter in the rest of its extent. It is apparently well supplied with water, must be healthy

from its position, and the character of its vegetation renders it probable that it possesses a fertile soil.

59. The harbour in Macpherson's Strait is accessible from the eastward at all seasons of the year, and possesses safe anchorage for vessels of any burthen. Access from the western side would be difficult and dangerous in the South-West Monsoon; and the whole of that side of the island exhibited proof of the violence of the weather to which it is subjected, during a great part of the year.

60. The north shore of Rutland Island is unfortunately surrounded by a dense belt of mangrove, rendering it difficult to find a suitable landing place.

61. It is, therefore, in all respects inferior to Old Harbour for a settlement; yet it may become very valuable hereafter, should the Andamans be colonized.

62. The second of the Cinque Islands would form an excellent isolated station for very refractory convicts, who needed entire separation. It is three miles in length by one in breadth at the broadest part, is unusually well supplied with water, and is separated sufficiently from all other land, to render escape from it next to impossible. It is fertile in some parts, and would most likely prove very healthy, but scarcely contains a sufficiency of land fit for cultivation to maintain a settlement. During the North-East Monsoon it is easily accessible, but approach to it would be somewhat difficult in the South-West Monsoon. A landing could always, however, be effected at its north east corner with a little care.

63. Its distance from Old Harbour being only 24 miles, it could without much trouble be readily superintended, visited, and supplied from that place, if necessary, at all seasons of the year.

64. We did not examine the Labyrinth Islands, as they were evidently unsuitable for convict settlements, being closely surrounded by reefs, difficult of access, too close to each other, and probably not abundantly supplied with water. They are flat, and covered with dense, lofty, and luxuriant vegetation. They may prove valuable hereafter, as from their position they must be healthy.

65. On proceeding northward along the western coast, which near the southward of the Great Andaman is very free from mangrove on its sea face, we found a fine
Discovery of a new Harbour,

spacious harbour not visited or described by Blair, to the south-west of Old Harbour. The land at its eastern end is within two miles of the western extremity of Old Harbour. It is surrounded by a narrow belt of mangrove which is so placed as not to be able to affect injuriously the health of any settlement in Old Harbour. A short road, little more than two miles in extent, would here connect the eastern and western shores, a point of some importance in their future occupation, as by opening up and clearing the intermediate land, a healthy sea breeze could be obtained during both monsoons.

66. The new harbour is unfortunately accessible only from the South through the passage between the Labyrinth Islands, a navigation far too difficult and dangerous to be used by vessels in distress during the South-West Monsoon. On attempting to run parallel to the coast in steering Northward, the coral reefs, which are here very extensive, were found to be too near the surface to admit of the passage of a vessel of even such light draft as the *Pluto*, the water shoaling suddenly from 8 to $1\frac{1}{2}$ fathoms. An attempt to stand to sea in the direction of the North Centinel failed from the same cause, so we had to return through the Labyrinth to the southward.

67. We next proceeded to Port Campbell, a very fine harbour, but at all times difficult of entrance or exit, on account of the direction and extreme narrowness of the deep water channel at its mouth. It is therefore unsuited for a settlement, so we did not examine it minutely.

68. After this the Committee proceeded through the strait separating Middle from South Andaman, to ascertain, if possible, the physical features of the interior of the island.

69. The strait was, in the greater part of its extent, bounded by very deep patches of stunted mangrove, the growth of that plant being evidently checked by the quantity of fresh water that falls into the strait during the rains. At present they must render all land lying in a northeasterly direction extremely unhealthy. If reclaimed, hereafter, they might form rich rice lands.

70. On leaving the Middle Strait, we again proceeded Northward to Interview Island, the last place examined by the Committee.

71. This fine Island lying parallel to, and at a small distance from

the main land, forms a large and secure harbour open for ingress and egress at both North and South extremities, but well sheltered from the violence of the South-West Monsoon. It is surrounded by a belt of mangrove every where, except at its southern end, where the land is higher and more healthy looking. It is covered with dense vegetation, and seemed to be well watered. In all its other characters, it bears a strong resemblance to the remaining islands on the western shore being little elevated, and bearing evident marks of the exposure to the violence of the elements to which they are subjected in the South-West Monsoon.

72. It is more thickly peopled than most parts of the Coast, but appears to share the general deficiency of animal life remarked in the whole group.

73. It may prove a valuable settlement hereafter, and from its free exposure to the sea in the greater part of its extent, would most likely be healthy; but it is, in all essentials, so manifestly inferior to Old Harbour, that a very minute examination of it was deemed unnecessary.

74. Landfall Island and the Cocos were not explored. The former only was looked at, but as both of them are too directly in the track of commerce, and are deficient in harbours, they are evidently not suited for convict settlements; no time was, therefore, wasted in exploring them.

75. The land on the northern part of the western shore is every where much lower than the corresponding portions of the eastern coast.

76. An attempt to approach the opening in the western end of the strait supposed to exist between the Northern and Middle Andamans, failed, the steamer grounding on a coral bank at a distance of two miles from the entrance. As the strait, in these circumstances, is utterly useless for the purposes of navigation, no further time was spent in exploring it.

77. In conclusion the Committee are of opinion that Old Harbour is the only place that possesses the greater number of the requisites for a Penal Settlement, and they accordingly recommend its occupation for that purpose, in preference to any other of the localities visited and examined.

78. They cannot refrain from taking advantage of this opportunity

Tribute to Lieutenant Blair. to record their admiration of the great judgment of Lieutenant Blair, in originally selecting that spot, and of his accuracy as a Hydrographer.

79. They also beg to suggest that, as considerable practical inconvenience may result hereafter from the identity of names in the two former settlements, that the name of the Old Harbour may be changed to Port Blair, in honor of that distinguished Officer.

80. So little is known of the inhabitants of the Andamans, and that little is so mixed up with fable and fiction, as to have induced the Committee to pay more than ordinary attention to all measures calculated to open an amicable intercourse with them, and to throw light upon their habits and customs. From first to last they rejected every attempt at conciliation, and either avoided, or forcibly opposed all attempts to hold communion with them.

81. Traces of them were found on Chatham Island and the shores of Port Cornwallis generally, but no native was seen there.

82. The first contact with them occurred at Craggy Island. On rounding that place to anchor under its shelter, a large party of them were surprised fishing on a reef running out from the main land, with a few separated from them on a sandy spit of the island. The latter we conjecture to have been women, and they had a small canoe lying on the beach. As soon as the steamer had anchored, the Committee landed in two well-armed boats. The people who had been seen on the islet had disappeared in the dense jungle which covered it. In the canoe, which with its contents was left exactly as it was found, beads and looking glasses were placed, and the party immediately re-embarked, to show the natives that their intentions were friendly, and free from even the semblance of hostility.

83. During and previous to the time occupied by this proceeding, the men on the reef, ten or twelve in number, exhibited every sign of the most implacable hostility. They gesticulated violently, vociferated, waved bows and arrows, and one of them brandished a spear with a metallic head, which gleamed brightly in the rays of the setting sun. Another of them waded to his waist in the sea, howled defiance, and shot a couple of arrows in the direction of the steamer.

84. They were all naked, and intensely black. They appeared strong, well built, sturdy men of middle size, and did not exhibit the smallest fear of us.

85. We approached to them as close as the surf on the reef permitted, waving handkerchiefs, and shouting the word *Padoo*, which is given in a vocabulary published in the Asiatic Researches by Colebrooke as signifying *Friend* in the language of the natives of the Andamans.

86. All was in vain, and as the Committee were most desirous to avoid collision with them in their angry mood, which might have been caused by a belief that their women were in danger, the boats were withdrawn, and pulled to the Southward, to seek a safe landing-place preparatory to searching for signs of fresh water. Five of the savages ran along the beach for more than a mile, and then disappeared in the jungle.

87. On rounding a point some two miles from the reef, a shelving, shingle beach was found, on which a landing was effected. There was a large hut close to it, which was scrupulously respected, and presents were placed in it. Sentries were posted near the boats to prevent surprise, and the party proceeded Northward along the shore, to look for a watering-place. The advanced guard had scarcely walked a hundred yards, when arrows were fired at them from an open patch of jungle. The attack was immediately repelled by a volley of musketry, which did no damage, but frightened away the savages, who were not again seen that evening. As it was getting dusk, it was not deemed prudent to run any further risk of collision. The party was therefore re-embarked without further adventure.

88. On the following morning, the canoe was found to have been removed, and for some time no natives were seen. As the steamer was leaving they reappeared, and repeated their pantomime of hostility and defiance.

89. Thus ended the first attempt to become acquainted with the dreaded Anthropophagi.

90. The Committee are particular in relating the incidents connected with their first essay, as the same spirit of conciliation marked all their efforts, and in every instance in which collision occurred, the aggressors were the savages.

91. On four occasions they attacked the approaching party, and were repelled without bloodshed. On two others they disappeared, leaving their huts with fires still kindled, and their canoes at the mercy of the Committee. Bows, arrows, nets, and such of their utensils or

weapons as were calculated to throw light upon their customs, were taken, their canoes and dwellings were respected, and presents were invariably left in them.

92. The last attempt to approach them was the least happy in its results, and occurred where an untoward end was least to be expected.

93. It happened at South Reef Island, near the southern extremity of Interview Island. All published accounts of the Andamans agree in representing the inhabitants of Interview Island as more sociable, less savage, and more disposed to friendly relations with strangers, than those of any other portion of the Andaman Group. They have been described as aiding in discharging the cargoes of wrecked vessels, and performing other acts of amity, which led the Committee to believe that they differed essentially from all others of the aborigines with whom they had vainly striven to establish friendly relations, and that their advances would at length be met in the spirit in which they were offered.

94. After steaming round Interview Island to ascertain its general physical characters, the *Pluto* passed to the Southward of South Reef Island, and had turned again to the North, when a group of natives, about 30 in number, were observed assembled together on the beach, gazing quietly at the steamer as she passed. There were seven canoes lying on the beach, and the party were evidently waiting for low tide to fish upon the reef.

95. The Committee left the Steamer in the first cutter. The second cutter followed as a support in case of need, under the charge of Mr. Cotgrave, Midshipman of the *Semiramis*.

96. On approaching the island, the natives had taken to their canoes; the boats followed, and soon gained upon them. All arms were carefully concealed, and all gestures calculated to alarm the natives were avoided. When within a hundred yards of them they exhibited bows and arrows, and began the usual gestures of hostility, exactly as witnessed on the East coast.

97. Three of their canoes were isolated from the rest. The men in the first cutter ceased rowing, and the boat drifted quietly towards them. Handkerchiefs were waved, presents were held up and shown, the shiboleth, *Padoo*, was shouted, and no act of hostility was committed by any one in the cutter.



98. The leading canoe was seen to be gradually edging away and when within about fifteen yards of us, the men in all the canoes simultaneously started up, and discharged a flight of arrows at the first cutter, with considerable force and precision. Lieutenant Heathcote, a seaman, and Dr. Mouat's jemadar were struck with arrows in the first cutter, and one man was wounded in the same manner in the second cutter, which had come up by this time. As the savages were well supplied with arrows, and were about to repeat their aggression, the Committee opened fire upon them. Three of them were shot dead, and the rest abandoned their canoes to swim to the shore, which the greater number of them were seen to reach in safety. The moment the natives were unable to continue the action, the cutter's crew were ordered to cease firing, and no pursuit was attempted, as the savages were considered to have been sufficiently punished for their aggression.

99. One of the natives, when in the water, seized a strap thrown to him from the second cutter, and was taken on board. The Committee deliberated anxiously as to the disposal of this man, whether to release, or to carry him to Calcutta. They ultimately decided on the latter course as the one required by the interests of humanity, although attended with hardship to the individual, until he can be instructed sufficiently to know the reasons which led to his removal from his country and his kindred.

100. In the future occupation of the Andamans it is of the utmost importance to the wretched outcasts occupying its shores, that the means of communicating with them should exist. They are at present either so savage or so ignorant as to regard all new-comers as enemies, to resist all attempts at intercourse as aggressions, and to put themselves out of the pale of humanity by the violence and mistrust of their proceedings. The contact with civilization in such circumstances can only end in their destruction, whereas if they can be persuaded that no harm is intended to them, it is not visionary to hope that the means of reclaiming and restoring them to a place in the human family which they do not now occupy, may be found.

101. It may also be the means of saving the lives of those who may hereafter be cast away on their dreaded and inhospitable shores, should the savages be taught, that to treat them kindly will be rewarded, while murder and violence will meet with the most certain, swift, and stern punishment.

102. To ascertain their manners and customs, and to establish their identity with any existing portion of the Negro race, to which they clearly belong, would solve the mystery of ages, and lead to a knowledge of the probable manner in which Asiatic Islands came to be occupied by an African people.

103. To gain some knowledge of recent shipwrecks and what has become of the unfortunate cast-aways is also of the deepest interest, and may lead to the rescue of any unfortunate individuals who may be in captivity among them, should such exist. This is by no means improbable, as we have every reason to doubt that the savages are cannibals, and found evidence that shipwrecks are not uncommon on these islands.

104. All these objects can only be accomplished through the instrumentality of a native of the islands, old enough to be acquainted with their manners, customs, language, and traditions, if any exist, and not too old to be beyond the reach of instruction. To himself, the shock of the severance of his ties and associations once past, the end can only be one of advantage, in rescuing him from a precarious existence in the lowest scale of humanity, and in rendering him the instrument of much probable future good to his own race.

105. For these reasons, the Committee venture earnestly to hope that their proceedings will meet with the approval of the Right Honorable the Governor General of India in Council, and that steps will be taken to train and educate the individual referred to, so as to gain a knowledge of his language, and to send him back to the Andamans to be the means of communication between the settlement and the inhabitants.

106. The identity in the construction of their huts and implements of all kinds, in the making and management of their canoes, and in their habits so far as they could be learnt from the little the Committee were able to see of them, leads the Committee to believe that the same tribe occupy the whole of the group examined.

107. They are evidently dwarf Negroes, with all the physical characters of Africans. They appear not to exceed five feet in height, to be strong and tolerably well built, and all those we saw were in good condition.

108. They frequent reefs and rocks where shell fish exist in abundance and are easily caught. When they have exhausted one

place, they migrate to another. At Port Campbell, we found one village recently abandoned, and another in course of construction, the palms covering the huts being green and fresh. The latter was within a mile of the former.

109. In no place did we discover the smallest attempt to cultivate the soil, or to penetrate to the interior. The few paths we found were short in extent and led to water courses: beyond them the principal forest was untouched and untrodden by man.

110. Their huts are rude and open on all sides. In general they consist of four posts, the two anterior being much higher than the two posterior ones, which are close to the ground. The former varied from three or four to about ten feet in height. The thatch generally consisted of a few palm leaves lightly bound together and overlapping each other.

111. In every village there were one or two huts of larger dimensions, some twelve or fourteen feet square, with well-thatched roofs plaited on a rattan frame.

112. One quadrangular hut was seen, supported on corner posts, with the eaves of the thatch within a foot and-a-half of the ground. Most of the others were quite open in front and at the sides, the rear being protected by the thatch reaching nearly to the ground.

113. In many of the huts bunches of the skulls of fish, pigs, and tortoises were hung up. The skulls were variously marked of red color. Near all the huts were found an abundance of empty shells.

114. The canoes are scooped out of the trunks of trees and vary considerably in size. The process must be extremely tedious, as it is performed by a dwarf adze with a wooden head, in which a small, sharp, semicircular blade of iron beaten out, is placed. This is sharpened on a stone, which was invariably found with it. The canoes are propelled by bamboo poles and paddles, the latter consisting of a handle about three feet and a-half long, with a small blade, either pointed or circular at the end. Many of them were ornamented by cross lines of red paint.

115. The canoes which put to sea are armed with an outrigger, very similar to that used by the Cingalese.

116. In the canoes were found small hand-nets, bows, and arrows, nets containing empty shells, old nails, bits of stone, and similar rubbish.

117. One large strong net, with immense meshes, and singular floats, was taken. It appears to be used for catching turtle, as it must

be too large for any fish under the size of a shark, and not strong enough to capture the latter. The floats are pieces of wood, four feet in length, with a sheaf of shavings at the end. The net had stones attached to it as weights.

118. Their weapons consist of bows and arrows, of two kinds. One form of bow is flat and gracefully formed, the other much stronger and rougher.

119. Photographs of all these will be submitted as soon as they can be taken.

120. The arrows are of several kinds, and generally about four feet in length. Some of them are of simple, hard pointed wood let into a straight reed. Others are pointed with iron and barbed. Some of the barbed heads are attached to the reed by a strong cord waxed and tied to both the head and shaft of the arrow.

121. In some of the huts were found what appear to be shields of hard red wood, of considerable size, but of which the probable use is not well determined.

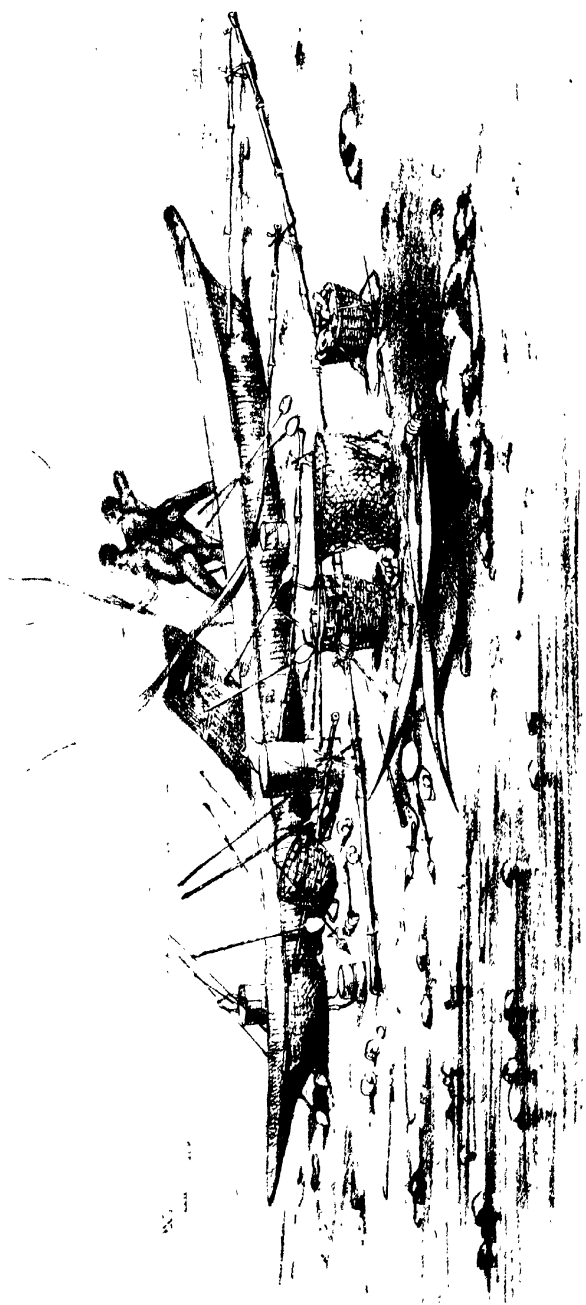
122. They manufacture a tough cord from a strong fibrous bark, and scoop out blocks of wood for vessels to contain fresh water. The usual drinking cup is an empty nautilus shell.

123. They have small wicker baskets, which are fastened to the waist when they are fishing, by a coil of strong coarse round cord, of which three or four folds were seen round their bodies. To the end is attached a piece of iron beaten into the form of a knife blade, probably to open shells.

124. The only vegetable food found in their canoes or habitations was the fruit of the mangrove, a large leguminous bean, and some wild spinach. The former is sliced in shreds, and placed to soak in fresh water in a small, closely woven net. We did not ascertain whether they were eaten cooked or raw.

125. The inhabitants seen by us were all entirely naked. The top of the head and the anterior part of the chest were covered by a red clay, which was found hardened in large shells. Their bodies are scarred in lines by a cutting instrument, being a savage form of tattooing.

126. All hair is removed from their scalps and bodies, with the exception of the upper lip of the men, where a scanty amount of stunted woolly hair was seen.



THE SHIP'S DECK

127. No indication of cannibalism was found in connection with their dwellings, not a human bone or relic of any description being found, either of their own dead, or of the bodies of the people wrecked on their coast.

128. The two largest villages seen were on the southern shore of Old Harbour, the one containing twenty-two, the other fourteen huts. In general three or four huts were all that were found together.

129. We had no means of estimating even approximately the probable population of the Great Andaman, and from the migratory habits of the people, it will be difficult to form any accurate conclusion on the subject. They were in larger numbers on the western, than on the eastern coast, so far as we could see.

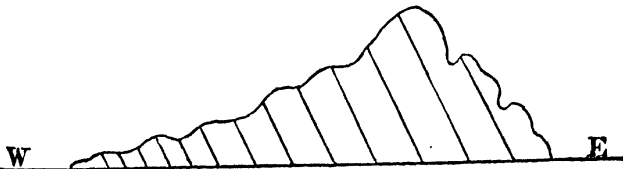
130. The Island called the Great Andaman is about 125 miles long, with a breadth varying from five to sixteen miles.

131. Its length runs North and South in the 93° of East Longitude and between the 11th and 14th parallels of North Latitude.

132. Strictly the Great Andaman is formed by three islands distinguished as North, Middle, and South.

133. The two latter are separated by a strait averaging a quarter of a mile in breadth and extending for 12 miles North-West and South-East. It has a considerable depth of water all through, but the eastern entrance, owing to the presence of a bar, has only a depth of one-and-a-half fathoms. The two former are separated by a labyrinth of narrow canals meandering through the swamps, but there is no distinct passage or strait, of which the existence is indicated as probable in Lieutenant Blair's chart.

134. Looking at the Great Andaman as one island, a section of it from East to West would exhibit something of this form.



The highest land wherever seen is on the eastern, and gradually descends towards its western shore.

135. The water shed is therefore chiefly towards the West, and consequently it is on that side of the island that marshy localities will most probably abound.

136. A section of the island from North to South shows the existence of several elevated ridges which all have one characteristic in common, their highest point is towards the North and they gradually decrease in height to the South until they terminate either in low marsh land as at Andaman Strait, or in undulating land of moderate elevation as to the south of Old Port Cornwallis.

137. Rutland Island, which in fact might be looked on as a continuation of the Great Andaman, has also its high mountain which gradually sinks towards the South into a succession of low undulating hills.

138. To the North of Port Cornwallis the island is formed of a series of low hills, having the usual outline common to trap formations.

139. Immediately to the South from that port, the land rises until, about 7 miles to the South, it reaches its highest elevation in the Saddle Mountain, the height of which is 2,100 feet. It then gradually decreases for the next 11 miles when the hills terminate and there is some extent of land similar in character to the Sunderbunds, low swamps covered with mangroves, and intersected by narrow canal-like passages filled or half empty as the tide rises and falls.

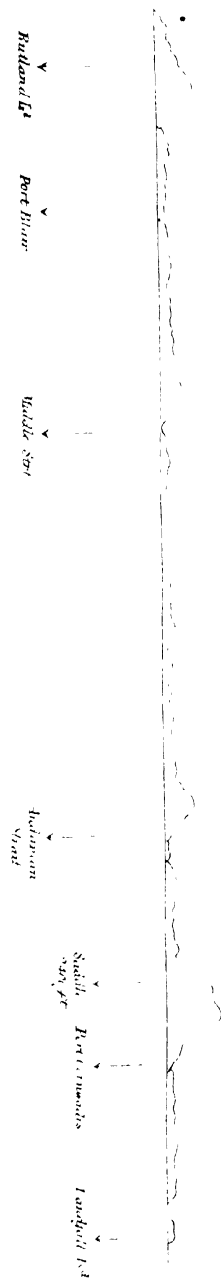
140. A few miles to the South, the land again reaches a considerable elevation and retains it for eighteen miles, when it resumes a lower character, but we are unable to say to what extent, as the portion of the coast opposite the Archipelago was not examined.

141. At the eastern entrance of Middle Strait, hills are again prominent, become more so a few miles to the South, pass Old Harbour, and terminate at Macpherson's Straits.

142. Of the Geology of the island we have not had sufficient opportunities to warrant any detailed description.

143. Specimens of rocks have been collected from every locality on which we landed, but it will require some time, and the assistance of a practical Geologist to arrange and classify them.

144. In an economical view, the discovery of extensive beds of silicious sandstone and limestone, is important, as affording a supply of materials necessary for a settlement.



Horizontal No. 45 M to 24 inches
Vertical " 300, 400, 500

145. The hills throughout the Island are covered from their summit to their base with luxuriant vegetation, and will supply any amount of material for building and other purposes. They include Bamboos, Palms, and Rattans, as well as timber trees.

146. On the East Coast as far South as Long Island, there is a great deficiency of water; we noticed few running streams.

147. It is probably in consequence of this, that there are so few birds in that part of the island.

148. At Old Port Cornwallis where water abounds, there were numerous birds, but our occupations did not permit of any collection worthy of note being made.

149. The only Mammal whose existence we ascertained was the Pig, their skulls being found suspended in the huts of the savages.

150. Throughout the expedition we found the "General chart of the Andamans" by Lieutenant Archibald Blair, (a manuscript copy of which was obtained from the Surveyor General's Office prior to leaving Calcutta) of the greatest use. It has always proved a safe and certain guide to all those parts of the islands which had been examined by him in detail, and it was only in those spots where his survey has been less minute that we have found it to be at all defective, and all these localities have been found to be of such a nature as to be of no practical utility, either in themselves, or from being beset with dangers which render them so. Thus, we found the strait which connects Port Andaman with Steward's Sound, to be impassable even for a boat at low water, and the western coast in the parallel of Old Port Cornwallis is so deeply fringed with coral as to render the fine harbour which was there discovered, and has been before alluded to, all but useless.

151. But those places which have been attentively surveyed, as evinced by the fullness of the detail represented on the chart, such as Old and New Port Cornwallis, Rutland Island, Port Campbell, &c., we found to be in exactly the same condition as delineated by Blair nearly 70 years ago. This was particularly observable in the Middle Strait, where islets of only 50 yards in length appear in precisely the same state, both as to size elevation, and position, as that represented by the first surveyor. The very vegetation upon them would give the idea of its being the growth of only the last Monsoon, and the only signs of age are the dead stems and

Hydrographical Features of the Great Andaman.

branches of trees standing amongst the low mangrove, stunted by want of the free access of the waters of the Ocean.

152. The permanency of the features of this passage is no doubt attributable in the first place to the hard sandstone formation, which is prevalent in the neighbourhood, and which forms the foundation of these islets, as well as of the points which govern the windings of the strait; further, the tides are weak and carry no silt with them, and the drainage is merely that of the adjacent hills, which would amount in the aggregate to 50 square miles, and this, being distributed along the whole length of the Strait, is far too small to affect it.

153. The whole of the shores of the Andaman are skirted by continuous coral reefs. Coral abounds in every bay and is strewn in broken pieces on every beach. These reefs are far more extensive, and form dangers to a far greater distance from the land on the West Side than on the East, depths of 100 fathoms being found in many places on the eastern shore within three miles of the coast and generally at a distance of five miles, whereas on the western shore the reefs extend and form dangerous patches at a distance of twenty and twenty-five miles from the land, a fact the probability of which is sufficiently indicated by the geological features of the Islands, the general dip of the stratified rocks being to the eastward and at a high angle, sometimes as much as 75° .

154. We were unable to make any observation on the growth of the coral, both on account of the chart being on too small a scale for such a purpose, and our own time not permitting.

155. Navigation amongst coral must, at all times, be hazardous, and the most minute survey may fail to detect some of the isolated rocks formed by the insect, of the approach to which no warning is to be found. The banks which exist so far to the westward must always prove an impediment to the prosperity of a colony established at Interview Island, or on any part of the western coast.

156. The hydrographical features of the several places visited have so direct a bearing on the point we are called upon to decide, that it has been thought better to include them in the general description of those localities, where they will be found.

157. We are happy to have it in our power to report that, notwithstanding the constant exposure of our party in
Absence of Sickness. boats, and in penetrating primeval jungle never

before traversed, not a single case of sickness occurred from beginning to end.

We have, &c.,
(Signed) FRED. J. MOUAT, M. D. *President.*
Surgeon, Bengal Army.
,, GEO. R. PLAYFAIR, M. D.
Surgeon, Bengal Army.
,, J. S. HEATHCOTE,
Lt., I. N.

FROM

F. J. MOUAT, ESQUIRE,
President of the Andaman Committee,

TO

C. BEADON, ESQUIRE,
Secy. to the Govt. of India.

HOME DEPARTMENT.

Dated Fort William, the 15th January, 1858.

SIR,

I REGRET much to have to report for the information and orders of the Right Hon'ble the Governor General, that the native of the Andaman Islands brought up to Calcutta has been so seriously ill since his arrival, as to render it absolutely necessary to send him away to save his life.

2. He was first attacked with Cholera, which was treated successfully: and then with Bronchitis, which threatened to merge in the low form of Typhoid inflammation of the Lungs, that destroys Sonthals and all other wild tribes so rapidly and certainly in the Jails of the Lower Provinces.

3. In these circumstances Staff Surgeon Pilleau of Her Majesty's Service, Dr. George Playfair, and I, concurred in considering it absolutely necessary to send him to sea as soon as possible.

I have accordingly, in anticipation of sanction, embarked him on the Hon'ble Company's Steamer *Pluto*, and placed him under the charge of the Officer Commanding that vessel.

4. Should he recover completely on the passage to Moulmein, which I hope will be the case, I venture to suggest that he be made over to the Commissioner of the Tenasserim Provinces to be educated, and

disposed of, in the manner recommended in the Andaman Committee's report.

5. The climate of Moulmein is much milder and more equable than that of Calcutta; and at Amherst he can obtain the sea air and diet necessary to maintain him in health, until he becomes accustomed to the extreme change in his mode of life.

6. On the other hand, should his health not have improved materially on reaching the Tenasserim Coast, I think he had better be returned to the Andamans, and landed where he was taken, at the South-thern end of Interview Island.

I have, &c.,
(Signed) F. J. MOUAT,
President, Andaman Committee.

No. 146.

FROM

C. BEADON, ESQUIRE,
Secy. to the Govt. of India,

TO

F. J. MOUAT, ESQ., M. D.,
G. R. PLAYFAIR, ESQ., M. D.,
LT. J. S. HEATHCOTE, I. N., } *Members of the Andaman Committee.*

GENTLEMEN,

Dated the 15th January, 1858.

HOME DEPT. I AM directed by the Right Honorable the Governor General in Council to acknowledge the receipt of your report, dated the 1st Instant, and to convey to you the cordial thanks of the Government of India for the judicious, prompt, and effectual manner in which you have carried out the instructions contained in my letter of the 20th November last, as well as for the business-like and practical shape in which you have submitted the result of your investigation. Your proceedings from first to last are entirely approved.

2. His Lordship in Council agrees with you as to the selection of the Old Harbour (which it is intended shall henceforward bear the name of Port Blair) for a Penal Settlement, and instructions have this day been issued to Captain H. Man, Executive Engineer and Superintendent of convicts at Moulmein, to proceed thither in the *Pluto* as soon as possible after her return, with all the means necessary for clearing a site and otherwise preparing for the reception of convicts.

3. I am directed to request that 50 impressions may be made of the series of Photographs taken during the expedition, and that after reserving five copies for the use of the Members of the Committee the remainder (of which 10 should be mounted) may be sent to this Office. The canoe and implements should also be properly packed for transmission to the Honorable Court of Directors. The Geological specimens had better be deposited in the Museum. 18316

4. The new Harbour discovered by the Committee on the West coast of the Great Andaman opposite to Port Blair, will be called Port Mouat after the President.

5. The Governor General in Council entirely approves of your having brought to Calcutta the inhabitant of the Andamans, who after the unprovoked attack made by the savages on the boats of the expedition, fell alive into your hands. His Lordship in Council had hoped that this man would have become an useful medium of communication between the Officers of Government and his own countrymen, and have given assistance in reclaiming them from the state of profound and primitive barbarism in which they now exist. He regrets, however, to learn from Dr. Mouat's subsequent letter of this date, that the health of the man has suffered so much since his arrival in Calcutta that it is thought advisable to send him to sea.

6. The Governor General in Council thinks it best that the *Pluto* should proceed from hence in the first instance to Interview Island and land the native as near as possible to the place at which he was taken, and His Lordship in Council desires me to request that he may be abundantly supplied with useful articles of peace, such as carpenter's tools, knives, cotton cloth, thread, cords, axes, metal pots and pans, as well as with beads, looking-glasses and such like objects of savage finery. And every possible endeavour should again be made to assure his countrymen, both through him, and by direct signs, that our objects are friendly, and that they have nothing to expect but good treatment at our hands. Dr. Mouat will be so good as to give the Commander of the *Pluto* all needful instructions on this head.

I have, &c.,

(Sd.) CECIL BEADON,

Secy. to the Govt. of India.

COUNCIL CHAMBER, *The 15th January, 1858.*

EXTRACT from a Despatch from the Hon'ble the Court of Directors in the Political Department, No. 19 of 1858, dated the 18th May.

OUR GOVERNOR GENERAL OF INDIA IN COUNCIL.

Foreign Letter dated 8th April,	No. 21,	1857.	1. We now reply to your
" " " 2nd May,	" 33,	1857.	several letters noted in the mar-
" " " 2nd May,	" 31,	1857.	gin, relating to the survey of
" " " 9th Sept.,	" 58,	1857.	the Andaman Islands.
Judicial " " 7th Jan.,	" 2,	1858.	
" " " 19th Jan.,	" 3,	1858.	

2. On the receipt of our letter of the 1st of October, 1856, directing you to despatch, at your earliest convenience, a steamer with a surveying party under competent directions for the exploration of the islands, the season had advanced too far to admit of preparations being made for the commencement of the proposed survey (there being no steamer then available for the purpose,) but in the early part of the following cold season the importance of the Andaman Islands, as a convenient place for the reception of convicts, having in the meanwhile, been greatly enhanced by the mutiny in the Bengal Army, you nominated, on the 20th of November last, a Committee consisting of Doctors Mouat and Playfair of the Bengal Medical establishment, and Lieutenant J. A. Heathcote of the India Navy "to examine the shores of the Andaman group of Islands, and select the best site which could be found there, for the establishment of a penal settlement."

3. In accordance with instructions from your Government, the Committee proceeded to Moulmein on the 23rd of November, on board the Steam frigate *Semiramis*, and on the 8th of December, they again embarked at that place on board the *Pluto*, taking with them 12 Burmese convicts "accustomed to forests" and a guard of three convict peons; besides an Officer and twenty European seamen from the crew of the *Semiramis*, to protect the exploring parties.

4. On the 11th of December, the *Pluto* anchored in Port Cornwallis, off the northern coast of Chatham Island, where a British settlement had existed for some years towards the close of the last century, and had been finally abandoned in 1796, on account of its extreme unhealthiness. The Committee were anxious as a preliminary to their investigations to ascertain the causes of this reputed insalubrity, and they were not long left in doubt regarding them. "It appears," say the

Committee, "to have been ill selected as a site for a settlement, two-thirds of its own shore being fringed with a dense belt of mangrove, and the prevailing winds during the greater part of the year, at its most unhealthy season blowing over the swamp surrounding the island. Conditions more certainly calculated to secure the largest measure of unhealthiness, it would be difficult to find."

5. Having ascertained this fact the Committee proceeded to make a general exploration of the Andaman group, and eventually returned to Old Harbour, which we apprehend, is on the South Eastern coast of the northernmost of the three islands, known as the Great Andaman. This was the first place fixed upon for the original settlement, and successfully maintained by Lieutenant Blair, until, for the sake of better anchorage, the colony was removed to Port Cornwallis, which lies to the north-east of the island. No inconvenience on the score of unhealthiness had been experienced by our first settlers in the more southern locality, and when the Committee proceeded to examine it, they found that it fulfilled many of the most important conditions of a healthy place of residence. They accordingly recorded a strong opinion in its favour. "The Committee," they wrote, "are not aware of any physical indications by which the healthiness of an uncleared locality can be absolutely predicated, but so far as ordinary experience can be accepted as a safe guide, Old Harbour seems to afford fair promise of proving as healthy as any locality similarly situated in a tropical region. Its means of drainage are ample and most efficient, the removal of all effete matter beyond the reach of causing mischief will be easy, and any possible existing tracts of marsh land, do not lie in the direction of the prevailing winds. We are therefore of opinion, that as a small portion of it (Chatham Island) proved continuously healthy during the time it was occupied sixty years since, with ordinary care in the construction of buildings and strict attention to conservancy arrangements, a more extended and permanent settlement will prove equally salubrious."

6. The Committee afterwards visited other parts of the Andaman group, but they found no spot fulfilling so many conditions essential to success, and they finally arrived at the conclusion that "Old Harbour is the only place that possesses the greater number of the requisites for a penal settlement, and they accordingly recommend its occupation for that purpose, in preference to any other of the localities visited and examined."

7. The natural resources of the proposed locality, which the Committee recommend should be named "Port Blair" in honour of the intelligent Officer whose name is identified with our first efforts to colonize the Andaman islands, are said to be considerable. There is an abundance of good water, much culturable land, and judging by the luxuriance of the vegetation, a generally fertile soil; there is excellent clay for the manufacture of bricks, an inexhaustible supply of sand-stone for building purposes, and large forest trees for timber: circumstances which will greatly facilitate your operations for the establishment of the proposed settlement.

8. With regard to the inhabitants of the islands, the report of the Committee bears out, except in one particular, the description given by former authorities. The exploring parties could find no trace of cannibalism, but the inhabitants are represented as of an exceedingly savage, suspicious and implacable character, resenting all our efforts at intercourse, and inviting hostilities whenever our people approached them. The proceedings of the expedition towards these poor people were distinguished by the greatest forbearance and humanity; but the aggressiveness of the savages was such, that collision could not be altogether avoided, and in one affray invited by the natives, three of their number were killed, one prisoner was taken and subsequently carried to Calcutta, with the view of educating him, and making him a medium of communication with the natives, by means of which they might be taught that our intentions towards the people of the islands are of the most friendly character. The man, however, soon sickened in Bengal, and you were compelled to send him back to his native island, but not without the hope that by furnishing him with a number of useful articles of peace, as well as with certain objects of savage finery, a favorable impression might still be made upon the minds of this strange people.

9. The admirable manner in which Dr. Mouat and his associates in the Committee of exploration performed the duties entrusted to them, is sufficient proof of the wisdom of the selection. They evinced great intelligence and sound discretion in the prosecution of their investigations, and, in their dealings with the savage people of the island, a laudable humanity and forbearance. Their report is extremely curious and interesting; and we do not doubt that you will cause it to be included in the published selections from the records of your Government, taking

care to illustrate it with an intelligible map, the want of which at present very much impairs the value of the report.

10. This report having been taken into the consideration of your Government, you were of opinion that a convict settlement might be advantageously established at Port Blair. You therefore directed Captain Man, the Executive Engineer and Superintendent of convicts at Moulemein, to proceed to hoist the British flag, and to take formal possession of the group of Islands, called the Andaman Islands, consisting of the Great and Little Andamans, and all the islands adjacent thereto, in the name of Her Majesty the Queen and the East India Company ; and you made arrangements for a party of convicts, mostly sepoy mutineers, who had been sent down from the Punjab to Kurrachee, to be conveyed at once to Port Blair, instead of to the Tenasserim provinces, as originally intended.

(True Extract,)

R. B. CHAPMAN,

Under-Secy. to the Govt. of India.

APPENDIX.

APPENDIX, No. 1.

CORRESPONDENCE RELATIVE TO THE OCCUPATION
OF THE ANDAMAN ISLANDS.

GOVERNMENT OF INDIA --HOME DEPARTMENT,

PUBLIC CONSULTATION,

6TH AUGUST, 1858.

NO. 4152, DATED NOVEMBER 28, 1855.

No. 77. From J. W. DALRYMPLE, Esquire, Officiating Secretary to the Government of India, to W. GREY, Esquire, Secretary to the Government of Bengal.

IN a recent Despatch,* the Honorable the Court of Directors, commenting on the outrages committed by the inhabitants of the Andaman Islands on ship-wrecked seamen, which were brought to notice in the papers received with Mr. Under-Secretary Young's Memorandum, dated the 6th July, 1854, observe that they "cannot doubt that the subject has received the consideration its importance demands."

2. The attention of the Honorable the President in Council having thus been called anew to the subject, I am directed to invite the suggestions of the Honorable the Lieutenant-Governor of Bengal, as to the measures he would propose for the protection of such British Subjects as may unfortunately be cast away on the Andamans.

3. The only effectual remedy would be the occupation of the islands in question, but this is manifestly impracticable. However, His Honor in Council believes, that good might be effected by the establishment of a convict settlement on the south-west part of the southern island, which is reputed to be healthy.

4. It will be in the Lieutenant-Governor's recollection, that Port Cornwallis, on the leeward side and end of the islands, was abandoned because of its very unhealthy climate.

NO. 96, DATED FEBRUARY 29, 1856.

No. 78. From W. GREY, Esquire, Secretary to the Government of Bengal, to the Secretary to the Government of India, Foreign Department.

I AM directed by the Lieutenant-Governor of Bengal to acknowledge the receipt of Mr. Officiating Secretary Dalrymple's letter, No. 4152, dated the 28th November last, regarding the outrages committed by the inhabitants of the Andaman Islands on ship-wrecked seamen, and requesting the suggestions of the Lieutenant-Governor as to the measures he would propose for the protection of such British Subjects as may unfortunately be cast away on those islands.

2. In reply I am now directed to transmit the accompanying copy of a letter from the Commissioner of Arracan, No 18 of the 8th instant, which appears to the Lieutenant-Governor to embody some very valuable suggestions on the subject.

3. It is obviously Captain Hopkinson's opinion, that not only the Andamans, but also the Nicobars, should be occupied and brought under our Government. He would do this gradually, using the establishment of a penal colony on the West or south-west side, as a first step to a complete occupation.

4. In this opinion, the Lieutenant-Governor, I am directed to say, entirely concurs: for the purpose which is mainly in view in the re-agitation of this question, the mere establishment of a penal colony at one extremity of one island would be inadequate, nor would any thing short of entire domination prevent the evils which now occur from the savage and unbridled ferocity of the present inhabitants. On the other hand, there is good reason to suppose that the occupation of these islands would bring many positive advantages, while their supposed unhealthiness would probably not be found more lasting than that of the coast and islands of Arracan.

NO. 18, DATED KYOUK PHYOO, FEBRUARY 8, 1856.

From Captain HENRY HOPKINSON, Commissioner of Arracan, to W. GREY, Esquire, Secretary to the Government of Bengal.

I HAVE the honor to acknowledge the receipt of your letter to my address, No. 541 of the 18th December, 1855, with its enclosures* requesting that I would report on the measures I would propose for the protection of such British Subjects as may unfortunately be cast away on the Andamans.

* No. 4152, dated Fort William, November 1855, from Officiating Secretary, &c, to the Secretary to the Government of Bengal.
Note on Port Cornwallis on the Great Andamans by R. C. Tulloh, Esquire.

2. I have given the question much con-

sideration, but I do not see how it is possible to reply to it otherwise than as expressed by Mr. Secretary Dalrymple, that the only effectual remedy would be the occupation of the islands, and if this should appear impracticable, then I must still agree that the establishment of a British settlement on one of the islands, which might extend itself hereafter as circumstances allowed, would be the next best thing.

3. The relation in which the Andamans shall henceforward stand, with reference to our commerce in the Bay of Bengal, to our commercial settlements on its coasts, and especially to those on the eastern side,—whether we are to renounce all connection with these islands or whether they shall be included in our system, form a subject which I certainly do think deserves most earnest attention.

4. Looking on the map at the magnificent situation of these islands, their proximity to such seats of trade as Madras, Calcutta, Akyab, Rangoon, Moulmein, Penang, and Singapore, considering their extent, which must comprise an area of not much under two thousand square miles, their many fine harbours, and the prospect, reasoning from analogy, of the abundant fertility of their soil, it does seem astonishing that their condition on the present day should be such as to make us wish that they could be blotted from the face of the ocean or sunk a thousand fathoms deep below its surface. That instead of offering a refuge to the miserable storm-driven vessel, they should be a snare in her path leading to utter destruction, and in place of engaging the enterprise, and furnishing subsistence to thousands of industrious colonists

* I believe, though, that rats and pigs are nearly the only Mammalia to be found on the islands.

they should be left in the possession of a handful of degenerate negroes, degraded in habits and intelligence to a level little above the beasts of the forest* with which they dwell.

5. A scarcely more hopeful acquisition could a large portion of Arracan have appeared some thirty years ago, than the Andamans now. In climate and natural features the two countries are likely to have much in common, and the change which, within my memory, has been effected in the former, may perhaps warp my judgment in supposing that the task of reclaiming the latter may not be altogether so impracticable as is believed. Further, though a matter beyond my province to discuss, I may surmise that the reasons which towards the close of 1788, led the Board of Administration to seek a harbour sufficiently capacious to afford shelter to a fleet, have rather gained than lost in force in 1856. We have much more to protect now than we had then, and without pretending to speculate on the march of events, I may imagine the case of our having deep cause to rue that we had left it to any power but our own to find a capacious harbour for a fleet at the Andamans.

6. However, it matters not whether we can find in any considerations of domestic or foreign policy, arguments weighty enough to reconcile us to the occupation of these islands, or a portion of them; for if the protection of the unfortunate seamen who may be cast away on their inhospitable shores cannot be otherwise assured, it is inevitable the question is no longer one of expediency, but, belonging to the first duty of a Government, should be performed at even a great sacrifice. Let us suppose that on the line of one of our great trunk roads there intervened a tract in the condition of the Andamans, should we hesitate at any cost to make it safe? and is not the obligation equal, to provide for the security of our ocean highways? I do not see either that we can limit our concern to British Subjects. We maintain the right of possession to the islands, and other nations may tell us in the phrase of the day, that this property has its duties as well as its rights, and demands that we abate such a nuisance to the rest of the world.

7. If it be conceded then that some partial occupation of the Andamans for protective purposes should be attempted, only its nature and locality remain to be considered; for the first I can imagine no better plan than that of which the idea is suggested by His Honor in Council: I would found a Penal Settlement, but so constituted that it might form a nucleus for a colony or that a colony might grow up side by side with it, into which it would hereafter merge. It appears to me that it would be difficult to lay the foundation of a permanent settlement in any other way, than by the establishment of a convict depôt in the first instance. It would be the cheapest plan, as of labour, which would otherwise be the chief source of expense, if indeed it could be procured at all on any terms however exorbitant, we should have abundance, at the cost of maintaining and guarding a body of men, who have to be guarded and maintained under all circumstances. The system pursued in the management of English Penal Colonies would probably be consulted with advantage in many respects, but it would be premature now to enter into any questions of organization or detail, and I shall make but a very few remarks on what occur to me as some of the more salient points. The prisoners at first would have to be employed in making the station, with its roads, barracks, public buildings, and jail, and when completed, those who had not forfeited the privilege by misconduct, would receive tickets of leave, and be allowed to labour for their own profit only. Natives of Arracan, Pegu, or Burmah, and the Tenasserim Provinces, convicted of any crime for which any less term of imprisonment than say seven years (or even a lesser term may be fixed) would be deemed an inadequate punishment, should invariably be transported to the Andamans, and their wives might be encouraged to follow, by giving the husbands of those who came, tickets of leave at the earliest period. The Burmese would find in

the Andamans, a climate and a country quite congenial to them, and although so sparse a population, I believe they would have founded a colony there by this time, had they been left to themselves. They frequently visited the islands, and I suspect a good deal of the hostility of the Natives to foreigners may be laid to their account, as I have heard that they used to capture them to carry into slavery. I do not of course mean, that only Burmese convicts should go to the settlement, but the more of this race there were, the better. Military guards might be furnished from the Regiments stationed at Rangoon and Moulmein. The settlement would not be more than a couple of days' run from Moulmein for the coast Steamer, and the guards might be relieved therefore readily and easily as often as was necessary. The Superintendent would also require a small sea-going Steamer, at his disposal, and a couple of Schooner Puckets of a burthen of say 50 or 60 tons. The establishment of the settlement should not be commenced with, earlier than in November or later than December.

8. I now proceed to consider in what part of the Andamans the new Settlements should be located. But in the first place, it seems worth while to examine on what grounds their extreme insalubrity generally has been assumed: they may be insalubrious, the climate may be, as I have seen it called, a most merciless one, but what proofs have we of the fact? Properly applied, it does not appear to me that the experience gained in the expedition under Lieutenant Blair and Captain Kyd warrants any such conclusion, and we have none other to guide us. Their occupation appears to have lasted for about six years and a half, or from October or November, 1789, to the middle of 1796, and for the first four years I learn from Mr. Tulloh's most interesting précis that in all Lieutenant Blair's reports, he made favorable mention of the climate; it was not until the close of 1793, that the sickness which led to the settlement being abandoned, made its appearance. Thus there were four years of health and two and-a-half of sickness, and the balance is in favor of the climate. Moreover it seems that as long as the settlers were at Old Port Cornwallis, they kept well; and that it was not until they were removed in the fourth year to New Port Cornwallis, that they fell sick. I should not draw the conclusion from this that the islands generally were very unhealthy, but simply that the choice made of New Port Cornwallis was a bad one. Now it is not very easy to determine beforehand how a place will turn out. Much more is guessed at than is known concerning malaria, but with this reservation I must say that the unhealthiness of New Port Cornwallis is but what I should have expected from its position, to which the south-west monsoon would bring, as it came sweeping up their entire length, the accumulated miasma from every part of the island group. The settlers were so placed, in fact, as to

receive the full benefit of whatever there was noxious in the air. With a similar position, the same thing happens at this station (Kyouk Phyoo), the south-west wind travelling up Ramree Island, makes it during the rains exceedingly unhealthy ; while at Akyab the rainy season, when the wind blows directly on the town from the sea, is, I think, the healthiest period of the year. However, I must say, I am much more astonished that the settlers should have been so well in their first location, than that they should have suffered so much in their second. One might almost suspect that Lieutenant Blair's representations were favorable on this point, but if the fact were so, it proves a great deal for the Andamans that the first spot selected should have been found so salubrious, and that at starting, and in the first years, which are always the most fatal. But beyond this, the sickness afterwards experienced at the second station, even if the special cause I have found for it be set aside, would not, I believe, prevent the climate from being favorably contrasted with that of any part of the adjoining coast. "Remittent fever and enlargement of the spleen," writes Captain Kyd, "were the principal complaints with which settlers were attacked," and the ravages were so great that the Surgeon of the settlement reported that "one-fourth of the people on the island were totally unfit for any kind of duty." Now I will undertake to affirm that Captain Kyd would have had to deplore far more frightful ravages, had his little colony been established under similar circumstances, and at that time, in any part of Arracan, Pegu, or Tenasserim. Considering how little hygiene had been studied in those days, and that the nature of remittent fever, which commonly attends the clearing of lands for new settlements in all inter-tropical regions, was scarcely understood, that its attacks must have been constantly provoked and then invited anew by the mode of treatment employed to repel them, that Quinine had not been then discovered, I am surprised that no more than one-fourth were sick. What was the state of the case 30 years later at Rangoon, Arracan Town, and at the Island of Cheduba, beyond contradiction now the healthiest part of Arracan, but where our soldiers died *en masse* on first landing ? and even now what has been the case with most of the new stations established in Pegu ? A proportion of sick often greater than that reported by Captain Kyd. No, I do not suppose that in the Andamans we shall find a Montpellier, but, should they ever be occupied, I do think they will be discovered to possess generally, a climate superior to that of most of our settlements on the eastern side of the Bay.

9. From the remarks I have made as regards New Port Cornwallis, it will be understood that in the event of a fresh attempt to form a settlement being made, I should prefer a return to Chatham Island, or else to move to the western side of the group, and I should think that at Interview Island or Port

Andaman, the first Port made by Lieutenant Blair, a suitable position would be found.

10. If I am right in my conjecture that most of the wrecks on the Andamans occur during the south-west monsoon, when the west coast is the lee-shore, the fact would be an additional argument for having the settlement on the western side. Away off at New Port Cornwallis, it could render very little assistance or protection.

11. I would not recommend the re-occupation of these islands for their own sake; but I am very far from thinking that we should find nothing in them which would in part compensate for our having undertaken it. The abundance of fine timber proves the capability of the soil to yield the richest agricultural produce. The cocoa-nut would no doubt flourish. The low lands would furnish heavy crops of rice. On more elevated tracts, the nutmeg might be cultivated with advantage; it grows well on the islands lying off Mergui, which is in the same latitude as Port Andaman, and if it were found to succeed, Chinese settlers would soon flock in to engage in its culture. Fibrous materials are also likely to be procurable in large quantities, and the timber must be well worth attention, if, as Lieutenant Blair asserts, it is fit for ship building. Fisheries would also be found remunerative.

12. Any project for the re-occupation of the Andamans should also comprehend arrangement for exercising from them a surveillance over the neighbouring group of the Nicobars. Those islands have acquired a horrid notoriety of late years for the murderous piracies committed by their inhabitants. An interesting article on the subject appeared in the columns of the *Englishman* Newspaper, under date the 4th of January of this year; the writer, however, gives no later instance than 1818; but it will be within the memory of Government, that on information submitted to it in 1852, Captain Dicey, of the Steamer *Tenasserim*, was despatched to the Nicobars, and that his report left no doubt that two vessels, one of them English, had been recently destroyed and their crews murdered by the Natives. This, if I remember right, was at Kar Morta, and one of the victims was an English woman, who, with her children, was put to death under circumstances of the most shocking atrocity. It would be well if these islands could be reduced to our authority, and, if the establishment of a Penal Settlement were the only consideration, they would probably answer as well for that purpose as the Andamans.

NO. 49, DATED APRIL 22, 1856

No. 83. *From the Right Hon'ble Viscount CANNING, His Excellency General G. ANSON, the Hon'ble J. DORIN, Major-General J. LAW, and the Hon'ble B. PEACOCK, to the Hon'ble the Court of Directors of the East India Company.*

IN continuation of our letter No. 39, dated the 8th instant, we have the honor to transmit for your Honorable Court's information, a copy of a letter*

* Dated 19th March. from the Commissioner of the Tenasserim and Martaban Provinces, reporting the murder, by the inhabitants of one of the Andaman Islands, of eight Chinese traders.

NO. 118, DATED MOULMEIN, MARCH 19, 1856.

No. 80. *From Colonel Sir A. BOGLE, Kt, Commissioner of the Tenasserim and Martaban Provinces, to G. F. EDMONSTONE, Esquire, Secretary to the Government of India.*

I HAVE the honor to submit for the information of the Government, copy of a letter as per margin, from the Magistrate at Moulmein, together with copies of the depositions to which it refers, concerning the murder by the inhabitants of one of the Andaman Islands, of eight Chinese traders.

No. 62, dated 3rd March, 1856.

2. It is no doubt exceedingly to be regretted that the inhabitants of the Andamans never lose an opportunity of murdering all who may fall within their power; but a circumstance so well known and of so grievous a character must, long ere this, have frequently occupied the attention of the Supreme Government.

3. I therefore confine myself to simply submitting these documents in further illustration of the danger of landing on the Andaman Islands, and of the inhospitable and savage character of the Natives.

NO. 62, DATED MOULMEIN, MARCH 3, 1858.

From J. C. HAUGHTON, Esquire, Magistrate, to Colonel Sir A. BOGLE, Kt., Commissioner of the Tenasserim and Martaban Provinces.

I HAVE the honor to forward herewith copies of the depositions of the master and two of the crew of the Junk *Fuen Gren*, of this port.

1st.—From their statement it would appear, that having adopted an erroneous course from Junk Ceylon on their voyage from Penang to the Nico-

bars, they fell in with the Andaman group, and eight of their number landing on one of the islands to obtain water, were massacred.

2nd.—With people so intensely ignorant of navigation in command, it is no wonder that the vessel went out of its course, and it may be difficult to ascertain on which particular island the men were murdered: possibly the accompanying rough sketch, copied from one drawn by the master, may tend to solve the question.

3rd.—I trust you will represent this case to the Government. It is impossible to say how many lives may be lost in this way yearly, and to me, I confess, it appears highly discreditable in a civilized Government to allow such a state of things to exist within a sea, one may say, bounded by its own territories and on the high road to many of its chief emporia.

4th.—It must be recollected too that since the war, Rangoon and Bassein have become British Ports, and the commerce of both greatly increased.

5th.—I may remind you also that during the past year, three British vessels have been cast away on, or in the immediate neighbourhood of, the Andaman Islands.

Deposition of Ali Meu, Chinese, son of Ah Saing, aged 20 years, native of Survey in China, by profession a ship-master, now of the town of Moulmein; before J. C. HAUGHTON, Esquire, Magistrate, this 27th day of February, 1856.

Deponent duly sworn, sayeth—

I SAILED from Penang bound to the Nicobar Islands, on the 26th of the Chinese month Sevengists, in the Chinese Junk *Fuen Gren*, of which I am the master. We were bound to Nicobars to load cocoa-nuts. We made an island on which were two mountains, nine days after our departure; this we decided was not our destination, so we steered on N. N. W. and came to another island five days after; we had been detained by adverse wind. This island was one of the Hucmesan ("The Negroe Mountains") or Andaman Islands; coasting we saw some five or six men on the shore, and being short of water, concluded that it must be obtainable where men were; we therefore let down our boat and sent it on shore with eight men. When the people on the shore saw our men coming to the shore, they fled to their mountain. Our men landed, and leaving six men with the boat on the beach, the remaining two went in search of water. Immediately we saw our two men fleeing back, followed by twenty or so of the Natives, who began to attack our men; the latter struggled to get off the boat from the beach on which they had hauled it up, but they could not do so. We saw them kill all our men and drag them in the jungle. They also broke up the boat. As we were only five men

remaining in the junk, and had no remaining boat, we could do nothing; we hastily weighed anchor, and stood out to sea. The attack was made on our men at 8 o'clock in the morning; we saw all that was done plainly, as we were not further from the shore than the Police Office is from the Main Wharf. Nineteen days after we made the land, about Coopa, South of Mergui, where the lead mines are; we then coasted along to this place. It is twenty-four days since we made the land below Mergui. We made the land two days before the Chinese New Year's day. We did not land any where, as the mate was very ignorant of the coast, and we had lost our boat. We were on short allowance of water all the time, a small pot of water among five of us. We had only two casks of water when we left the Andaman, and had about half a cask left when we got to Amherst. I am quite certain that our men did not interfere with the natives. They had two dahs and some bamboos, but no other weapons. Our men raised their oars to defend themselves at first, but seeing themselves out-numbered, they fled and tried to get off their boat. They seemed to be very tall, as compared to our men. Looking at them with the telescope, they appeared to have merely leaves round their waist. We could not discern what arms they had. I would recognize the place if I saw it again. The Burmese Malin can show the place. He said he knew the course to the Nicobars. He went with us from this place. His name is Moung Poon; he lives in Mayangong. We did not know the land; the Malin and the writer, when we got well off the shore, recognized that the island was not of the Nicobars. I never heard before of the inhabitants of the Andamans.

Deposition of Ahyon, son of Saing Yon, aged 38 years, native of Suneng, in China, by profession a seaman, now of the Town of Moulmein, before J. C. HAUGHTON, Esquire, Magistrate, this 28th day of February, 1856.

Deponent duly sworn, sayeth—

WE sailed from Penang on 26th of 11th Chinese month last year, bound to Yasan (Cocoa-nut Island or Nicobar) with the wind E. N. E. We steered N. W. till we came to nine small islands called Saw-chee Ling; there we stood S. S. W. nearly four days and three nights, after we made a long low island. We made the land early in the morning. We steered about N. N. W. We then made another island at 4 in the evening. It was not very high, we stood on all night keeping three small islands on the right hand and the island just mentioned on our left, steering North (witness corrects himself) the bigger island was on the right hand; we passed between; the long island was the southernmost; we met one day and one night after an island on our left

side with a grassy plain on the North side and a hill on the South. We went on one day, having an island with high mountains in it on our right hand side. We thought we were going to the Nicobars all this time. Our Burmese mate suggested we should get water; we anchored therefore at day light. The Mate told us to go and get water; we objected that there were two casks on board, and that we did not know where we were; however, we put four big and five small buckets and some tubs into the boat, also some hand-spikes and rattans to carry them with. The boat went on shore with eight men including Mah Neng, a part owner and writer of the Junk. When the boat touched the ground, it was at once thrown upon the beach by the waves. They sent two men to look for water, and shortly after we saw them running and two men after them; the kaffirs cried out, then twenty or thirty men followed them and attacked our men and killed them, destroying also the boat. They remained in a circle round them a long time. We could not see what they did. At five we weighed anchor and stood North, and when the wind changed to North we stood East. In seven days we saw the mountain we had left. We returned back through the islands the way we had come, seeking a passage to get out of the islands; we then, not finding our way, returned back in three days, to the place where our men were killed. We went North of that island and steered East between those two islands, and in ten days came to Cow Cheling again. We had the wind N. E. and steered for Moulmein. We did not go into Mergui, as there were many sand banks and we had no boat. The people who killed our men, were black as ink. We had no weapon. One of our men had two dahs, (described case knives about a cubit long), none else had any weapon. None of the kaffirs were killed. The kaffirs continued round our men till they left. We saw our people all fallen. They fought for three or four hours with hand-spikes and oars, but the kaffirs got these from them at last.

Deposition of Moung Bwin, son of Moung Bok, aged 45 years, native of Taray, by profession a seaman, now of the town of Moulmein, before J. C HAUGHTON, Esquire, Magistrate, this 28th day of February, 1856.

Deponent duly sworn, sayeth—

I EMBARKED at this port as steersman on board a Chinese Junk, now lying in the river, about five months ago, bound to Bassein and Penang. We arrived at Penang in due course. We left that port I think about one month ago, with a crew of twelve persons, who being all Chinese, except myself, I do not know their names. We were bound to the Nicobars for coconuts, and thence to Bassein. We made land in eight days, a flat island. I told the crew it was not of the Nicobars, we sailed round it. At Penang I told my employers that

I had never been from Penang to Nicobars, and did not know the course. I was directed, however, by a Chinese, and under the instructions received, I sailed North. Three days after we left the flat island, we saw a high island, and we thought it was one of the Nicobars; as we got close, we saw it was not. In the morning the Chinese performed worship and said, as they had very little water, they would go on shore. We were at anchor and getting under weigh, stood in and cast anchor as far off the shore as the Main Street is from the Police Office. After anchoring, seven men got into the boat and went on shore; we had seen some persons on the shore. These, as they saw our boat coming, went into the jungle. Two of our men went in search of water, the rest remained by the boat. In a very short time a number of people came out of the jungle, about thirty men; our two men ran for their boat. They chased them and overtook them at the boat; a fight ensued between both parties; the Kaffirs killed all the Chinese and broke the boat to pieces with their hands. The Kaffirs had bows in their hands; they also pelted them with stones. Our men landed at about 9 o'clock; they could not get their boat off though they tried. The fight lasted about three hours; by this time our men were all killed. About four hours after (having waited that time to see if our men were really dead), we got under weigh, and stood to the northward, intending to go to Bassein or Arracan. The wind being foul, at the end of five days we stood East and after twelve days we made Selimore,* the place whence we had

* *Junk Ceylon.*

taken our departure for the Nicobars, and by the direction of the Captain we stood for Moulmein. The wind was N. E. when we first departed. From Selimore we intended to put into Tavoy, but thought it would be very hard to get in, as we had no boat; we therefore stood on to this place. I cannot say how many days elapsed from the time we took our departure from Selimore, till we got to Moulmein, no one kept any reckoning. I cannot be sure that the islands we made were the Kaffirs' Island (Andamans). I think so, as there is no other nation that kill people without reason. We steered N. W. from Selimore to go to Nicobars. The point we took our departure for, is a high cape projecting into the sea. The island on which our crew were killed, was about two days' sail in length, and very high and mountainous. We did not see any island to the North of it. We stood off shore. We had seen three small islands, and one a little longer to the South of it, the latter had a hill, but not very high. With a fair wind it would have taken about 10 hours to sail along it.

The Chinese did not provoke the Kaffirs in any way. The affair took place just as I have stated. The Chinese had hand-spikes of the windlass with them to carry water, but no arms. They had no arms in the junk whatever. There were five or six vessels for water in the boat.

NO. 39, DATED APRIL 8, 1856.

No. 82. *From the Right Hon'ble Viscount CANNING, His Excellency General G. ANSON, the Hon'ble J. DORIN, Major-General J. LOW, and the Hon'ble B. PEACOCK, to the Hon'ble the Court of Directors of the East India Company.*

WITH reference to paragraphs 4 and 5 of your Hon'ble Court's Despatch

Letter to Secretary to Government of Bengal, dated 28th November, 1855.

Letter from Secretary to Government of Bengal, dated 29th February, 1856.

Minute by the Governor-General, dated 15th March, 1856.

Minute by His Excellency the Commander-in-Chief, dated 16th March, 1856.

Minute by the Hon'ble J. A. Dorn, dated 17th March, 1856.

Minute by the Hon'ble Major-General J. Low, dated 18th March, 1856.

Minute by the Hon'ble J. P. Grant, dated 19th March, 1856.

Minute by the Hon'ble B. Peacock, dated 20th March, 1856.

in the Marine Department, No. 47, dated 29th August, 1855 we have the honor to transmit a copy of a correspondence with the Government of Bengal, and of the Minutes noted on the margin, respecting the expediency of forming a settlement on the Andaman Islands.

2. It will be observed that both the Commissioner of Arracan and the Lieutenant-Governor of Bengal advocate such an occupation commencing

with a Penal Settlement.

3. For our grounds of objection to the proposed measure, we refer your Hon'ble Court to the Minute recorded by the Governor-General.*

No. 84.

POLITICAL DEPARTMENT.

No. 37 OF 1856.

OUR GOVERNOR-GENERAL OF INDIA IN COUNCIL.

Para. 1.—We have taken into consideration the circumstances brought to our notice in your letters in the Foreign Department, dated the 8th and 22nd of April, Nos. 39 and 49 of 1856, and the opinions of the several members of your Government, relative to the expediency of forming a Settlement in the Andaman Islands in the Bay of Bengal.

2nd.—Formal possession of these islands was taken by the British Government in the year 1789. From that time to the year 1796, they were occupied by British subjects, but there was then, according to the Governor-General, a "deliberate abandonment" of them, on account, as the Commissioner of Arracan observes, of their "extreme insalubrity," and it does not appear that during

* The Minutes are not published.

the last sixty years, we have had any other than nominal possession of the islands. We do not conceive, however, that although we have suffered our rights to remain thus long in abeyance, there is any impediment to our re-assertion of them, whenever it may be convenient to us to adopt such a course.

3rd.—It is always possible that circumstances may compel us to re-assert these rights. It would have been highly inconvenient and objectionable, at any time, that a group of islands, so situated, should be occupied by strangers, but the importance of the consideration has been much increased, since we have become masters of Pegu. The Bay of Bengal is now, as observed by Mr. Grant, a British Sea, and it is more than ever incumbent upon us to prevent persons, not subject to the British Government, from settling within its limits.

4th.—That many vessels have been wrecked on the Andaman Islands, and many shipwrecked mariners destroyed by the savage inhabitants, are facts of notoriety, and, to some extent, of official record. We do not doubt, therefore, that a harbour or harbours of refuge at a convenient part of one or more of these islands, would conduce to the security of traffic, and to the general interests of humanity.

5th.—Whether or not it would be desirable to establish a Penal Settlement on the Andaman Islands, is a question dependent upon considerations, which it is not necessary to bring into view at the present moment.

6th.—Before, however, we decide upon a measure, the advantages of which are variously regarded by the different members of our Government, we desire to be supplied with more information than we now possess relating to those islands. It would be expedient therefore, in the first instance, that steps should be taken to explore them, and to report upon the sites which they may offer both for the construction of harbours of refuge on the coast, and for the establishment of penal or other settlements, not only on the shores, but also in the inland parts of the islands. We desire to know all that can be ascertained, without incurring great risks on the score of health, or heavy expenditure, regarding the number and character of the inhabitants, the animal, vegetable, and mineral resources of the country, the nature of the soil and of the climate, the quantity and quality of the water, and the general capabilities of the islands as a place of residence and as a field for cultivation. When we have received from you this information, which you will supply with all practicable despatch, we shall address you again on the subject.

7th.—We have confined ourselves in the foregoing observations to the case of the Andaman Islands, to which the papers before us principally relate, but we concur in opinion with Mr. Grant, who observes in his Minute of the 19th of March, that the contemplated "object would be very imperfectly obtained without the occupation of the Nicobar Islands." Of these islands,

* See Letter of British Minister at Copenhagen to Lord Palmerston, Secretary of State for Foreign Affairs, December 29, 1817, copy of which was furnished to Governor-General of India in Council, in our letter of February 1, 1818, No. 2.

all right to which was abandoned by His Danish Majesty in 1817,* possession has never been taken by the British Government. Forsaken by the Danes on account of an insalubrity, which it was conceived could only be subdued by an expenditure of life and money, for which there was likely to be no adequate return, these inhospitable islands hold out to us as at present advised, little inducement to plant the British flag upon them. But as it is possible that the apprehensions which deterred the Danish Government from continuing to occupy the islands, may have been unfounded or exaggerated, we desire that you will furnish us with such information bearing upon the reputed insalubrity of the Nicobars, as you possess, or may be able to obtain,—information calculated to enable us to form an opinion respecting the expediency or inexpediency of taking formal possession of the islands.

We are, &c .

(Signed) W. H. SYKES,

ROSS D. MANGLES, AND EIGHT OTHERS.

LONDON, October 1, 1856.

No. 24, DATED APRIL 8, 1857.

No. 85. *From the Right Hon'ble Viscount CANNING, the Hon'ble J. DORIS, Major-General J. LOW, and the Hon'ble B. PEACOCK, to the Honorable the Court of Directors of the East India Company.*

WE have the honor to acknowledge the receipt of your Despatch No. 37, dated 1st October last, requesting, before deciding upon the expediency of forming a Settlement in the Andaman Islands, to be supplied with more information relating to those islands, and directing that they may be explored and a report submitted on certain points,—also requesting to be furnished with information bearing upon the reputed insalubrity of the Nicobar Islands before taking formal possession of those islands.

2. With respect to the Andaman Islands, we beg to acquaint you, that the proper time at which to begin an exploration of those islands is at the cessation of the south-west monsoon, when the dangerous part of the coast is accessible, and when there is least risk to health.

3. Even if the Government of India had a steam vessel at its disposal, we doubt whether at this advanced season of the year it would be expedient to begin to organize an expedition; but as we have not got a vessel for this or any other purpose, it is unnecessary to consider that point.

4. For these reasons we beg to state that we propose to defer acting upon your instructions until next Autumn.

5. We do not anticipate much difficulty or risk (except to health) in the undertaking, if proper precautions are observed, and on this account the expedition will probably need to be upon a larger scale than your Hon'ble Court contemplate. Guards, baggage, animals, and supplies of all sorts must accompany it.



APPENDIX, No. 2.

PRECIS OF INFORMATION REGARDING THE ANDAMAN,
NICOBAR, AND COCO ISLANDS.

GOVERNMENT OF INDIA—HOME DEPARTMENT.
PUBLIC CONSULTATION,
6TH AUGUST, 1858.

No. 33., DATED MAY 2, 1857

No. 86. *From the Right Hon'ble Viscount CANNING, the Hon'ble J. DORIS,
Major-General J. LOW, and the Hon'ble B. PLACOCK, to the Honorable
the Court of Directors of the East India Company.*

IN continuation of our letter dated the 8th ultimo, No. 24, we beg to
transmit for your perusal, a copy of a precis which has been prepared in the
Foreign Office, containing information regarding the Andaman, the Coco, and
the Nicobar Islands.

No 81. THE ANDAMAN, COCO, AND NICOBAR ISLANDS.

THE following are the points on which the Hon'ble Court of Directors in
their Despatch dated the 1st October 1856,

* It is presumed that the Hon'-
ble Court did not intend that the
attention of Government should
be confined to the Andaman Is-
lands. (*Vide* the 7th para. of
their Despatch.)

No. 37, request to be furnished with information
regarding these islands :*

1st.—The sites which may offer, both for
the construction of harbors of refuge on the
coast and for the establishment of settlements,

not only on the shores, but also on the inland parts.

2nd.—The number and character of the inhabitants.

3rd.—The animal, vegetable, and mineral resources of the country.

4th.—The nature of the soil and of the climate.

5th.—The quantity and quality of the water.

6th.—The general capabilities of the islands as a place of residence, and as
a field for cultivation.

7th.—The reputed insalubrity of the islands.

The above points have served as a basis for the following precis, which, it is hoped, will be found to supply sufficient information for forming an opinion respecting the expediency or in expediency of taking formal possession of the islands. It may, at least, help the Government to determine whether an expedition should be fitted out at the end of the south-west monsoon for thoroughly surveying and exploring them.

The sources from which the scattered materials for this precis have been collected, are—

1st.—Official documents connected with the formation of a settlement by the Government of India on the Great Andaman in 1789.

2nd.—A chapter of Colonel Symes's "Embassy to Ava," containing a description of the above settlement in 1795.

3rd.—Mr. J. B. Quigley's account of his visit to Interview Island (one of the Andamans) and to Great and Little Coco. Printed at Moulmein.

4th. An *unpublished* Journal, entitled "Buseh's Nicobar Journal" which was kept on board the Danish Schooner *L'Espiegle* in 1815.

5th.—An article reprinted from the *Calcutta Englishman*, and brief notices in Thornton and Hamilton's *Gazetteers*, and Knight's "National Cyclopædia," used rather for the purposes of collation.

The Andaman Isles.

The Andamans are a cluster of four islands, with several islets in $92^{\circ} 30'$ East longitude and extending from $10^{\circ} 32'$ to $13^{\circ} 40'$ North latitude. They were surveyed in 1789 and 1790 by Lieutenant Archibald Blair, who made a circuit of the entire archipelago, and embodied the result of his researches in general charts, plans, and a report containing useful information for mariners.

The islands are indented by numerous bays and inlets, and are covered with forests of lofty trees, rendered impervious by tangled brushwood and intertwining creepers and rattans. Extensive coral reefs and shoals abound, and the shores are consequently dangerous. Some places may be distinguished afar off by white cliffs, which rise abruptly from the sea.

Three of the islands are so contiguous, being separated by very narrow straits, that they are usually considered as one island, under the name of the Great Andaman. It is 140 miles long, and its greatest breadth is 20 miles, and it may therefore be said to have a surface of about 2,800 square miles. In the centre, there is a mountain called the Saddle Peak, 2,400 feet above the level of the sea. The north peak of the saddle is at the distance of nearly two miles from the south peak; and there is a great hollow between them.

The island has several excellent harbours. Port Andaman, on the south-west coast was "minutely surveyed" by Lieutenant Blair in 1789. He reported that it was sheltered from the force of the monsoons; that the anchor-

age was safe; and that there was an abundance of good fresh water at the place. He next examined Port Campbell, of which he also approved; but he said that it would be difficult of access during the south-west monsoon. He found another good harbour at McPherson's Strait; but the anchorage was bad. None of these pleased him so much as Port Cornwallis, or, as it was afterwards called, Old Harbour, situated near the southern coast, on the East side of the island; of which he made a most favorable report. He described it as a very secure harbour, and as so easy of access, and "so perfectly screened from wind and sea, that a ship might run in without anchors or cables" without sustain-

Vide enclosure to letter from Junior Secretary to Government of Bengal, dated 15th January, 1857, No. 25.

ing damage, and might depart from it in either monsoon. He was further of opinion that it was capable of being very strongly defended against an enemy. In September, 1789, Lieutenant Blair was ordered to take possession of this harbour; and a little colony was speedily formed. He shortly after wrote to Lord Cornwallis, "I have the satisfaction to inform you that the settlement is healthy." He continued to send similar reports during the whole time that this place was occupied, that is, for about three years. Unfortunately, on the 12th November, 1792, without reference to sanitary considerations, orders were issued for the removal of the settlement to a more capacious harbour on the north-east side of the island, in which Her Majesty's Ships of War could be more conveniently received and sheltered during the continuance of the north-east monsoon. The following is Colonel Symes's description of the harbour: "Land-locked on all sides, nothing is to be seen but an extensive sheet of water, resembling a vast lake, interspersed with small islands, and environed by lofty mountains clothed with impenetrable forests. The scenery of nature is uncommonly striking and grand." This place also received the name of Port Cornwallis. The settlement, however, was not situated on the principal island, but on a smaller one, within the harbour, named Chatham Island.

The natural position of the new place chosen for the settlement, was objectionable on sanitary grounds; because the south-west monsoon, sweeping up the entire length of the island group, and passing over dense forests, filled, no doubt, with noxious exhalations, from rotting vegetation, would carry with it an accumulation of miasma and moisture to the north-east side. Captain Hopkinson, the Commissioner of Arracan, writing on the 8th February, 1856, says, that, with a similar position, the same thing happens at Kyouk Phyoo. "The south-west wind, travelling up Ramree Island, makes it, during the rains, exceedingly unhealthy; while at Akyab, the rainy season, when the wind blows directly on the town from the sea, is, I think, the healthiest period of the year." Partly also owing to the obstruction of the clouds by high

mountains, the island of Great Andaman is for eight months in the year, washed by incessant torrents. Colonel Symes wrote in 1795, "According to the meteorological table kept by Captain Stokoe, there appears to have fallen, in seven months, 98 inches of water, a quantity far exceeding what I had ever heard of in any other country."

It was not surprizing, therefore, that towards the close of 1793, the very first year after the removal of the colony, sickness prevailed to an alarming extent among the settlers. There were, by this time, several convicts, artificers, &c., at this place, besides the Europeans and lascars of an artillery detachment. The surgeon of the settlement reported that one-fourth of the number were quite unfit for any kind of duty. They suffered chiefly from intermittent fever, ague, and an "induration and enlargement of the spleen." The unhealthiness of the place had commenced with the rains, which had been so severe, that there had been few opportunities of doing any work without doors.

In February, 1796, the Governor General in Council considered it prudent to withdraw the settlement, "both with a view to humanity and economy," as not only had there been "great sickness and mortality," which, it was feared, would continue, but the Government had been put to "great expense," and had suffered much "embarrassment" in maintaining the settlement, and "in conveying to it supplies at that period." The convicts were transferred

Resolution of Government,
February, 1796.

* This island, which is twenty-one times smaller than Great Andaman, came into the possession of the British a few years earlier, in 1786.

to Penang,* and the settlers and others, about 550 persons, were brought back to Bengal. "Considering how little hygiene had been studied in those days," says Captain Hopkinson, "and that the nature of remittent fever, which commonly attends the clearing of lands for new settlements in all intertropical regions, was scarcely understood, that its attacks must have been constantly provoked and then invited anew by the mode of treatment employed to repel them, that quinine had not been then discovered, I am surprised that not more than one-fourth were sick." In the event of a fresh attempt being made to form a settlement, he would prefer a return to old Port Cornwallis, or else to move to the western side of the group; and he thinks that at Interview Island or Port Andaman (the first port made by Lieutenant Blair), a suitable position would be found. "If I am right in my conjecture," he adds, "that most of the wrecks on the Andamans occur during the south-west monsoon, when the West coast is the lee shore, the fact would be an additional argument for having the settlement on the western side."

The sea within the eastern and western range of these islands, is said to be Mr. Quigley's pamphlet, page 20. sheltered from violent agitation in every direction.

Mr. Quigley, describing Interview Island, which lies to the south-west of Great Andaman, states that it is almost surrounded by a sandy beach; and that, owing to "a great rise and fall of tide," it is admirably adapted for the construction of docks for the building and repairing of small-sized ships.

The islands seem to owe their origin chiefly to igneous agency. In 1789, when Lieutenant Blair visited Barren Island, he saw a volcano on it in a violent state of eruption; and in Great Coco, the soil of the hills consists of decomposed lava. The shores, however, are of coral formation; generally to the extent of a mile inwards, from low-water mark. In the Nicobar group, there are some islets, as for instance the one named Monthoule, which are entirely of coral formation.

Whether the Andamans actually "teem with the precious metals," as was supposed by "the late Dr. Helfer" (a gentleman to whom an incidental allusion is made in Mr. Quigley's pamphlet), a geologist could alone determine, after a careful examination of the rocks and soil. Dr. Helfer appears to have been killed by the savages. Whether he had previously made any researches cannot be ascertained from the materials before the writer. Near the southern extremity of Great Andaman, "where it is mountainous and rocky, some indications of minerals have appeared particularly often. There is also a kind of freestone, containing a yellow shining spar." Mr. Quigley remarked that the natives of Interview Island had made themselves interesting to those seeking for information, some by daubing their foreheads "very thickly, with

* This is also the practice of the South Sea islanders.

tushe, or red ochre;"* some by coloring their foreheads with "a blue pigment, probably manganese;" and others by rubbing their bodies with "grey iron ore, sparkling like mica, which is plentiful on the western side of the island."

The following is Mr. Quigley's description of the geological features of Interview Island, but it is questionable whether it should be offered on the *ex pede Herculem* principle. We have no similar information regarding Great Andaman. Lieutenant Blair, in his report to Government, speaks in general terms of the soil and climate of New Port Cornwallis, namely, that they are "all that can be expected from the most happy tropical situation."

"The soil towards the North-west (of Interview Island) is apparently a mixture of decomposed slate and clay, the slate gradually disappearing on approaching the hill running in the centre of the island. Vegetation is abundant over all the slate formation. From the regularity of the direction of the strata, the valleys are numerous, and much alluvial soil is washed down, which, blending with fallen leaves and other putrescent substances, produces a good superficial soil, in which trees grow to

† "Here I came across chloritic slate or soft rock slate clay, containing magnesia."

a large size, and the shrubs and smaller plants become particularly luxuriant and productive.

"The extreme western portion of the island is composed of a succession of stratified rocks; a difference at once distinguishable by the form and nature of the ranges, and the direction of the shores. The hills are irregularly heaped together, the streams are intricate and tortuous in their course, and the shores are formed by deep sinuosities and prominently projecting headlands. The channels also are studded with innumerable islands and rocks extremely dangerous to navigation. In this position, the rock is for the most part granite and greenstone; and it is a remarkable fact, that where the greenstone formation terminates, there the islands cease to appear. The decomposition of granite and other primitive rocks which are found there, forms but a poor unproductive soil; so that although the land is thickly covered with shrubs, they are all small and stunted. The torrents of water also that pour down the sides of the hill, as appears from the hollows formed by the water-courses, wash away the partial accumulations of soil that are occasionally deposited; consequently few trees are to be found, except in clefts and recesses of the rocks, where decomposed vegetable matter collects and nourishes their growth. The hollows are surrounded by a line of 'yarra gum trees, or white bark eucalyptus, which,' (*i. e.* the hollows) 'seemed at a distance to contain lakes, but instead of water, I found only blocks of vesicular trap, consisting, apparently, of granular felspar. Hornblende rock also appeared in the banks enclosing them. The soil South of the island is, generally speaking, a rich loamy soil, with fine vegetable mould in some places. It is very productive; a fact evidenced by the luxuriant growth of the forest trees in this quarter, and the perfect success which attended my cultivation of the date, pumpkin, and orange tree.

"The soil of many of the western islands which I visited, is rich and prolific; such as the larger Reef Inlet Island, the Western Island, and Landfall Island."

Regarding the climate of Interview, Mr. Quigley says: "The temperature of the island I should consider low, but the climate mild."

It has been asserted positively, as a remarkable fact, founded on the "statements of many respectable authorities," that while the Nicobar Islands, the nearest of which is 72 miles to the South of the Andamans, and the Cocos, which are 30 or 40 miles to the North of the Andamans, produce cocoanuts in great abundance, which are largely exported, not a single cocoanut tree has been found on any of the Andaman Islands. Whatever theory this statement might induce a person to construct, would be partially destroyed by a reference

Public (Home) Consultation
31st May, 1793, Nos. 6 to 9.

to the report submitted to Government by Lieutenant Blair, on the 27th May, 1793. That officer, in his circumnavigation of the group, saw cocoanut trees in two places; and in 1849, when Mr. Quigley gave the natives of Interview a cocoanut, and desired them to put it into the ground, they made signs to him, by which he understood them to mean that there were plenty of cocoanut trees on the island. The fact, however, yet remains, that while cocoanut trees are rarely seen on the Andamans, they are abundant on the Nicobars and on the Cocos. Colonel Symes noticed (with regret, for the sake of the natives) that there were none to be found at Port Cornwallis. On the other hand, it is stated in Busch's Journal, that from Car Nicobar alone, "more than 25 cargoes of not less than 100,000 nuts each, leave the islands every year." It is quite apparent that in a commercial point of view, the Andamans are not of the same importance at present as the Nicobars and the Cocos.

Of timber trees, the Andamans are prolific. Lieutenant Blair, in his description of Port Cornwallis, reported to Government that "the land in the vicinity of the harbour abounded with timber trees of excellent quality, and fit for all the various parts of ships." There are also several kinds of wood, well suited for building purposes, for posts, beams, &c.

The following are the names of the trees which have been found on this group; but there may be many others which have not been seen, owing to the difficulty of penetrating very far into the forests:

The banyan; the common almond; the wood oil tree, which grows to a great height;* the penangre, "well adapted for the knees of ships;" the iron tree, of "stupendous size," the timber of which almost bids defiance to the axe; the red wood, which "makes beautiful furniture, little inferior to fine mahogany;" the ever-green beech (*Fagus betuloides*); the lance wood tree; a species of ebony,† the mountain-jack (*Artocarpus echinatus*); the "poon," "soondry," "chingry," and "beady," the dammer-tree; the cotton tree; the Alexandrian laurel; the acacia, catechu; the cocoanut; poplars; aloes; mangoe, and a tree resembling the satin-wood.‡ There is also a tree of enormous size, "one having been

* From 80 to 100 feet; and in girth from 10 to 12 feet. A great quantity of oil can be obtained from one of these trees; and it is from this order (*Dipterocarpeæ*) that the commonest pitches and varnishes of India are produced.

† Probably *Diospyrus melanoxylon*, which grows on the Comorandel coast.

‡ One species of satin wood yields wood-oil. Another species is the *Cedrela toona*, or common toon.

found to measure 30 feet in circumference," producing a very rich dye. Mr. Quigley says that he saw on the beach of Interview Island, a number of "fine fir trees," at regular distances. Among the other vegetable productions, may be named mangroves (*rhizophora*), pumpkins, bamboos, and ground-rattans.

Hogs, rats, monkeys, and ichneumons appear to be the only mammalia which have been seen on Great Andaman. On Interview Island, however, Mr. Quigley says that there are tigers, leopards,* a species of white monkey, wild cats, wild dogs, a species of black pig with short legs, and several kinds of squirrels. A species of whale also resorts to these islands.

* Perhaps he was misinformed as to these facts. It does not appear that he saw them.

According to Colonel Symes, birds are not numerous in Great Andaman. Doves, parrots, and the Indian crow are the most common. Hawks are sometimes "temporary visitors." Lieutenant Blair saw several caves occupied by vast numbers of the small swallows (*hirundo esculenta* and *h. fusagna*) which build the edible nests so highly prized by the Chinese as a delicacy and restorative. Mr. Quigley gives the following longer list of birds in his description of Interview Island: wild fowl, ground doves, large green pigeons, teals, plovers, curlews, bulbuls, large and small parrots, mynahs, the red-headed wood-pecker, honey-suckers, a large brown hawk, a white headed fish hawk, the king-crow, the tailor-bird, cranes, white herons, crow-pheasants, blackbirds, and thrushes. On the western side, parrots and humming-birds are said to be very numerous.

The reptiles are snakes (several species), lizards, iguanas, tortoises, and turtles. The laborers of the settlement at New Port Cornwallis, whilst clearing away the underwood, were frequently bitten by snakes; "but in no instance," says Colonel Symes, "did the bite prove mortal, although the patients commonly fell into violent convulsions. Eau-de-luce and opium were the remedies." Another writer speaks of a "very venomous green snake."

Fishes are in great variety and abundance. Among them are mullets, skates, soles, pomfrets, rock-fish, gurnards, sardines, roc-bills, sable-fish, the shod, the alosee, and the cockup.

Under other heads of natural history may be mentioned centipedes, scorpions, prawns, and crabs, oysters, &c.

During the north-east monsoon, the people of the Malay coast of Sumatra visit the Andamans in prahus, for the purpose of collecting the edible nests, and fishing for sea-slugs called "trepan," or biche-de-mer, which is also a Chinese dainty.

With regard to fresh water, Lieutenant Blair saw several good springs and rivulets in Great Andaman. One of the latter had its source from the South peak of the Saddle. On the South-west side of Interview Island, Mr. Quigley saw a serpentine or zigzag lake (20 feet wide) of good fresh water. "Wherever," he says, "native huts appear, water is sure to be found; but as it partakes of a disagreeable vegetable flavour, it is only necessary to warm it before use."

The inhabitants of these islands are not merely a distinct, but widely different race from the natives of the Nicobars. The latter are evidently Malays, and are comparatively in a state of civilization, the former resemble negroes, and are probably of the same stock as the Papuans and the aborigines of Australia. Their language bears no affinity to that of the Nicobarians. From a very early period, even from a time anterior to that of Sindbad the sailor, they had the reputation of being Cannibals. This disgusting charge against them is worthy of being examined. It points, in reality, to a very pitiable fact, and a little scrutiny of the matter will serve to give an insight into the wretched condition of this people.

The Andamanese were the Anthropophagi, or man-eaters, of Ptolemy. Two Mahomedan travellers of the ninth century, translated by Renaudot, have left the following description of them: "The people eat human flesh

*The natives of New Guinea are called Papuans, from a Malay word signifying frizzled hair.

quite raw; their complexion is black; their hair frizzled;* their countenance and eyes frightful; their feet are very large, almost a cubit; and they go quite naked." Colonel Symes's picture of their personal appearance is not less ugly. "In stature," he says, "they seldom exceed five feet; their limbs are disproportionably slender; their bellies protuberant; with high shoulders and large heads; and, strange to find in this part of the world, they are a degenerate race of Negroes, with woolly hair, flat noses, and thick lips. Their eyes are small and red, their skin of a deep sooty black, whilst their countenances exhibit the extreme of wretchedness; a *horrid mixture of famine and ferocity*." The words underlined in this place, give a clue to the truth, which is further developed by Colonel Symes, when he says, that if these miserable savages do eat human flesh, the desire for it probably arises "more from the impulse of hunger, than from voluntary choice; a conclusion that well authenticated instances of the distress they at the times endure, appear to authorize." Mr. Quigley, too, says: "If they ever eat human flesh, I should think they do not do so by preference, but only when urged by necessity, in the absence of other food." It has been remarked that they bury their dead, and that the bodies of persons killed by them have

† Perhaps this argument proves nothing; since, very recently, the natives of New Caledonia, who are known to be Cannibals, did not eat the Frenchman whom they had treacherously killed.

been afterwards found without the flesh having been cut off, or any limb severed.† Nevertheless, when it is considered that they are among the very lowest in the scale of civilization, and that they have very limited means of subsistence, it may well be believed that they have sometimes been driven to the necessity of eating human flesh. Their forests "contain no animals to supply them with food." The cocoanut is hardly known to

them. Whatever esculent herbs their islands may produce, can be of little use to them, as they have no pot or vessel that can bear the action of fire. They eat the fruit of the mangrove, after steeping it in an embanked puddle of water. In their vegetable diet, Europeans have not discovered much that is palatable or nutritious. Their "attenuated and diseased figure too plainly indicates the want of wholesome nourishment." During the short time that Colonel Symes was at Port Cornwallis, "a coasting party one day discovered a man and a boy stretched on the beach, apparently in the last stage of famine. They were conveyed to the settlement. Unfortunately, every effort of humanity failed to save the man;" but the boy recovered, and was afterwards in the service of Colonel Kyd at Calcutta.

The principal food of these islanders is fish, with occasional *entremets* of rats, guanas, lizards, and snakes. There are also a few wild hogs, which they sometimes catch and eat. They shoot fish, like the South Sea islanders, with bows and arrows, and get them plentifully during the north-east monsoon, but often seek for them in vain during the tempestuous season. Having no inducement to penetrate their forests, they are disposed along the coasts in small knots or societies, restlessly "climbing rocks or roving along the margin of the sea, in quest of a precarious meal of fish." As soon as they fail to obtain a sufficient supply at one spot, they desert the frail huts erected there, and proceed to another part of the coast.

Their huts and implements are of the rudest description. Their canoes have outriggers; and the largest seen by Mr. Quigley could contain eight persons. In these they cross over to the neighbouring islands. Their arrows and spears are barbed and headed with hard wood. They possess nothing that is made of iron. Their sharpest implements are coral-shell knives. Mr. Quigley says, that they "despise both iron, copper, and other metals, much of which lay scattered upon the beach, belonging to the wreck of the *Emily*, and which, when they found them held in high estimation, they collected and delivered to the people of the Schooner *Sea Serpent*." This little anecdote deserves to be placed in juxtaposition with what is stated in Busch's Journal regarding the more enlightened people of Nancowry Harbour, in the Nicobars. "We found," says the writer, "that some of our visitors from Nancowry had managed to steal the brass rullocks of our cutter."

"Of the character of the inhabitants," says the Officiating Superintendent of Marine, in his letter to Government, dated the 13th January 1858, "it is sufficient to say, that they are cruel and treacherous savages, and that they are frequently Cannibals from necessity, if not from choice." In the same letter, it is stated that when, in November 1844, the *Briton* and the *Runnymede* were cast ashore on the East Andaman, with 700 men of Her Majesty's

50th and 80th Regiments on board, "although the troops mustered strong, and had saved their arms, ammunition, four of the party had been wounded with spears by the natives at the time the Commander of the *Briton* left the island." One writer states, that the savages are "cunning, crafty, and revengeful, and frequently express their aversion to strangers in a loud and threatening tone of voice, exhibiting various signs of defiance, and expressing their contempt by the most indecent gestures." At the commencement of the first Burmese War, when the army under Sir Archibald Campbell had assembled at Port Cornwallis, the natives "never failed to evince the hostile feelings with which they regarded a stranger's visit to their shores, by shooting flights of arrows at the boats, and flying to the interior, as soon as a landing was effected." Some of the settlers who originally went to Port Cornwallis were killed by them.

The picture has its lights as well as its shades. Mr. Quigley and Lieutenant Blair suggest some of the causes of the hostility, amounting almost to a passion, displayed towards strangers by these savages, who have, in many instances, been as much sinned against as sinning. They have had grounds for acting on their savage instincts. The former gentleman says, that "the intercourse with the natives" (of Interview Island) "was of the most friendly character, and was latterly approaching to familiarity;" and he thinks that their general inimical disposition is owing to many of them having been kidnapped and sold into slavery by the Malays, who collect trepang and edible nests on their coasts. Lieutenant Blair recorded his impression in the following words: "Several of the natives have been carried off to gratify an unwarrantable curiosity, and others entrapped and sold for slaves. Unless these alleviating circumstances are considered, a most unfavorable and unjust opinion would be formed of the natives. Our intercourse with those in the neighbourhood of the Old Harbour, afforded frequent opportunities of observing that they are susceptible of the most tender impressions, and that their dispositions are happy." "When Colonel Symes was at Port Cornwallis, some Bengal fishermen belonging to the settlement were killed; but it was discovered that they had provoked the outrage. They had enticed a woman, by the allurements of food, to come so close, that she was made prisoner. Instead of relieving her hunger, they proceeded to offer violence. The cries of the poor creature brought a numerous troop of savage friends to her assistance, who, rushing out of the thickets, attacked and killed two of the yet more savage aggressors." The bodies of the Bengalees were afterwards found, "pierced with sharp weapons, and pounded with stones until every bone was broken." These naked and untutored barbarians are not without a moral sense. Colonel Symes relates that two young women, who had been captured on board a ship at anchor in the harbour "soon got rid of

all fear of violence, except what might be offered to their chastity, which they guarded with unremitting vigilance. Although they had a small apartment allotted to themselves, and had no real cause for apprehension, one always watched whilst the other slept."

"Their religion," says Colonel Symes, "is the simple, but genuine homage of nature to the incomprehensible Ruler of the universe, expressed in adoration to the sun, and moon, the genii of the woods, &c. In the Spirit of the storms, they confess the influence of a malignant being, and during the South-west monsoon, when tempests prevail with unusual violence, they deprecate his wrath by wild choruses, which they chant in small congregations assembled on the beach, or on some rock that overhangs the ocean."

The total number of the inhabitants has been variously estimated. Colonel Symes wrote in 1795: "The population of the Great Andaman and all its dependencies, does not, according to Captain Stokoe, exceed 2,000 or 2,500 souls." An anonymous writer makes the following remark. "According to Hamilton (1815), the inhabitants do not exceed 2,500 or 2,600 souls; but later accounts state their numbers to be about 10,000."

The Coco Isles.

These two little isles are a few miles distant from the North-east point of Great Andaman. The larger of them is six miles long and two broad, the smaller two miles and a half long, and nearly a mile broad. They are sheltered by the Andamans from the heavy South-west swell of the Bay of Bengal, and afford facilities for careening vessels in safety; of both the islands it may be said, that they have a fine sandy beach all round, one or two commodious bays, and good anchorage, and that at the Southern extremity of each there is a reef of rocks extending several miles into the sea. Both islands also are uninhabited. In April 1849, an attempt was made to form a small settlement at Great Coco. Three Europeans, one East Indian, and eight Burmese proceeded thither from Moulmein; but choosing a very unhealthy site, close to an accumulation of decayed vegetable matter, seven of the number died, and the rest abandoned the island. The Burmese, however, who visit it every year, for the purpose of collecting and drying cocoanuts, do not find it so unhealthy. They go over from Tavoy, Bassein, Moulmein, and Arracan, and occupy it during the whole of the North-east monsoon, leaving it at the commencement of the South-west monsoon, when it is probably less healthy. "These men," says Mr. Quigley, "informed me that whatever sickness prevailed amongst them, originated at Little Coco, and that they generally improved in health on return to Great Coco. As evidence of the truth of their statements, the fact that fowls, which never thrive where marsh miasma pre-

vails to any extent, have increased and multiplied on the island." Little Coco is a very marshy, and of course unhealthy, place. "Swamps, thickly covered with willows, and dotted with a few clumps of pine trees, exist here and there upon the island," and "are the cause of the fever and ague with which almost every one is attacked who makes any long stay in it." For this reason, the Burmese occupy Great Coco during the North-east monsoon, and make only short trips to the smaller island, where cocoanuts are very abundant.

The smaller Coco rises to an elevated plateau in the centre, and has chiefly an alluvial soil. The larger one has a flat plain of rich black mould, surrounded by hills, which are coated with a soil of decomposed lava, of a deep chocolate color. "Both descriptions of soil are exceedingly fertile and suited to the growth of all descriptions of European and tropical grain and fruits."

The following are the vegetable productions, besides cocoanuts. The wood-oil tree; the wild palm (*pharnix palustris*); the fig; the pigeon pea, or doll; the common almond; the *randia dumetorum*, the bark of which is used for intoxicating fish; the mountain jack; the heart apple; the mango; the

mangosteen;* the betelnut; the sweet kront,
 * If it has the mangosteen, then the nutmeg should follow.

the rattan; the tree from which the Burmese obtain the materials for making torch-lights, "a species of timber for spars;" and "a variety of other descriptions of trees, which are capable of being applied to ship-building." In the patches cultivated by the Burmese and by the late emigrants, were seen the plantain, the pine-apple, the silk-cotton tree, pumpkins, chillies, garlies, onions, the tamarind, the orange, &c. Grass grows very luxuriantly in both the islands, and affords nourishing food to numerous large guanias, and shelter to flocks of teals.

The only mammalia are a few wild boars, black pigs, and very large cats.

The birds are teals; wild fowl; plovers; ground doves, (*Columba Indica*), crow-pheasants (*Centropus Phillipensis*); white and green pigeons; curlews; and quails and partridges in abundance. A number of domestic fowls having been set adrift in Great Coco, are now running wild about the jungle.

The shores swarm with large fish, prawns, crabs, oysters, turtles, &c.

There are snakes of many kinds in Little Coco; among them the Cobra Capella, and a small viper of a very venomous description. There are also lizards, guanias, and blood-suckers.

In the same swampy island, sand-flies and mosquitoes, as might be expected, are "exceedingly troublesome." The mosquitoes are of a large and venomous kind.

Fresh water is easily obtained at all seasons. It may be had in Little

Coco by digging to the depth of 5 or 6 feet. On the North-east side of Great Coco, there is a tank of good water, 200 feet in length, by 50 in breadth. Honey and wax are to be found in small quantities.

The Nicobar Isles.

The Nicobars are situated between 6°50' and 9°20' North latitude, and 92°50' and 94°10' East longitude. The group consists of nine larger islands and some smaller ones. The two most Southern are called respectively Great and Little Nicobar. The former is more than 20 miles long and 8 across in the widest part. It has a fine bay on the North-east side; another to the South, environed by hills and rocks and lofty trees; and a third on the South-east side, round which the surf breaks violently, but which affords good protection against the North-east monsoon. Little Nicobar is not half so large. It has a bay on the North-west side, regarding which Captain Lewis, the writer of Busch's Journal, states: "It is, without exception, the finest we have seen, and possesses many advantages." There is a bay at Terressa, "well protected against the North-east and South-west monsoon, but exposed to an Easterly gale."

The Danes formed a settlement on this group in 1756, but abandoned it 12 years after. In 1833, Her Majesty's Ship *Magicienne* touched at one of the islands, and found there a Danish Governor, Mr. Rosen (with 50 or 60 sepoys), who had instructions to carry on a trade in betel-nuts and edible-nests, to the exclusion of other nations. In 1845, with the concurrence of the Danish Government, Mr. D. C. Mackey, of the firm of Messrs. Mackey and Company, of this city, the Consul for Denmark, despatched an expedition to the Nicobars, under Mr. Busch and Captain Lewis (the present Master Attendant at Rangoon), who hoisted the Danish flag at Pulo Condul and Great Nicobar. They found the ruins of the last Danish settlement on the island of Camorta. "There was not a vestige of plantation or of cultivation, though the hills and valleys all round are entirely free from jungle." "We regretted much," says Captain Lewis, "that we could never obtain any clear account of the settlement nor of the misfortunes and obstacles it must have met with. The Islanders spoke with affection of the settlers, and also of the Government." "In the absence of a correct report regarding the last settlement in these islands," he continues, "it is almost useless to speculate on the probable causes of its failure; but it would appear to have been undertaken by men with little practical knowledge of colonization, who had themselves no interest at stake, and unprovided with means adequate to the task. In an attempt of this kind, all depends on the first settlers; they have every thing to face, and should be well

provided for accordingly, well lodged, well fed and attended, and their wants should, as far as possible, be anticipated ; whereas these had to depend upon a trading communication with the parent colony. A lakh of Rupees, properly disbursed at first, would avail more than five lakhs in as many years." He is of opinion that the best plan would be to colonize the island with Chinese laborers, and also with people from the Coromandel coast. In 1846, Captain Steen Bille, the Commander of a Danish Corvette, having reported to his Government " the present unhealthy state of these nominal possessions of the Danish crown, and the great expense which would attend any attempts to make them habitable by Europeans," His Danish Majesty came to the determination of finally abandoning all right to the islands.

Hon'ble Court's Despatch No. 2 of 1858, dated 1st February.

The Officiating Superintendent of Marine, in his letter to Government, dated the 13th January last, states that Mr. Mackey " speaks very favorably of the Nicobars as a field for colonization, and is of opinion, that if the jungle were cleared away, and other sanitary measures adopted, the Nicobars would become as healthy as Penang ; an opinion which is by no means uncommon, and which, the Officiating Superintendent adds, he has every reason to concur in."

The surface of these islands is hilly. At the Southern harbour of Great Nicobar, the nearest hill, on being measured, was found to be 1,575 feet above the level of the sea. There were others in the interior, of a greater height. In Little Nicobar, some of the hills are supposed to be about 1,000 or 1,200 feet above the sea-level. The island of Bompoka rises abruptly from the beach to the height of 750 feet. Pulo Cobra is a small high island, bristling with cocoanut and betel-nut trees.

Little is known of the interior of these islands. At Great and Little Nicobar " not a cleared spot is to be seen, except here and there a slip of land." Heavily timbered hills occupy the rest of the space. At Terressa, the soil on the sea-shore is " admirably adapted for cocoanut trees, while the high land throughout the centre of the island is red clay, with limestone, and is covered with a rich vegetable mould. It appears admirably adapted for the growth of sugar-cane, particularly as the climate is said to be moist, hot, and not very tempestuous, and the advantage of a sea-breeze could not fail to ensure a good cane." " The land being rather low, there is nothing to arrest the clouds, so that the rains cannot be very heavy. The heat on the high land is reported to be moderate." It seldom rains during December, January, February, and March, which are dry and hot months. At Little Nicobar, the heat under the awning, on the 22nd April, was frequently above 100°.

On a second visit to Terressa, one of Mr. Busch's party brought away

"These specimens of coal, though collected in various parts of the Nicobars, would seem to be very much alike in their nature, though differing a little in appearance. They have been no doubt injured by long exposure in the sands, to the weather, and to the sun, as well as water. To this cause is due their burning with little flame, as well as their hardness and great specific gravity. But otherwise they are, or at least were, good coal. They seem to bear, both in appearance and chemical properties, a nearer resemblance to the pitch, or Cannel coal of the little Tenasserim river, than any other specimen I have seen. The circumstance of their being all so nearly alike, is a favorable indication of the probable existence of one great bed extending to a considerable proportion through the islands."

"specimens of the soil on the high land, which is a red clay with stones, having a burnt appearance, one or two being certainly metallic." A large quantity of coal was obtained from the natives of Little Nicobar, who found it on Trice Island, at low-water. It resembled lignite or half-charred wood. It was very heavy, compared with the common coal, burned freely, and emitted a strong sulphurous vapour. Coal was also found at the following places: At Busch Island, a large piece; at Pulo Condul, on the North-east side of Great Nicobar, two pieces of rather better quality; and at the Southern bay of the same island. The rocks, where the last-mentioned specimen was picked up, consisted of soft sandstone and clay-slate. Dr. McClelland, Secretary to the Coal Committee, analyzed these specimens at the Hon'ble Company's Dispensary, and came to the conclusion noted in the margin.

A great traffic is carried on with some of these islands. Car Nicobar is visited by numerous English and Burmese vessels, as well as native crafts from the Coromandel Coast. "The staples of the island are cocoanuts, betel-nuts, pigs, poultry, and yams," which are bartered for fowling-pieces, hatchets, knives, &c., and are also sold for Rupees and Spanish Dollars. The natives keep a register of the vessels that touch at the island. At Terressa, besides cocoanuts and yams, wild mangosteens are abundant. "Sugar-cane of a very superior description," says the writer of Busch's Journal, "is also found; but we did not see it growing. The cane which was brought to us, appeared half cultivated, half-wild, was full of saccharine matter, but had a strong woody fibre." The jungle abounds with wild pigs. The inhabitants of Nancowry harbour, where many vessels have been plundered, have much intercourse with the Malays and the Burmese. Mr. Busch's party found Malays there, preparing trepang for the China market. "The natives brought adulterated ambergris, and dammers of very superior quality." At Little Nicobar the cocoanuts are not equal in size to those of Car Nicobar, nor are they so plentiful; but the water which they contain is "far sweeter and cooler." Pine-apples grow there wild, and in abundance, and a few excellent limes, or rather lemons, are to be found. Trice Island is visited every year by Malays, who remain there for 6 or 8 months, and prepare trepang, collect edible nests and turtle shell, and sell rice, arrack, and printed goods to the inhabitants. At Camorta too, "the Malays carry on much trade."

At Trice Island, there were "several magnificent specimens of the banyan tree." One covered a space of ground one-third of a mile in circumference, and "its branches literally swarmed with birds." An "enormous poor tree" was lying overthrown, having been evidently attacked by white ants, which were numerous.

The only mammalia of these islands seem to be monkeys and pigs.

Among the birds are a species of "hurrial" pigeon, the white-cliff pigeon, "the well known splendid ground pigeon of the Nicobars," kingfishers, the blue-tailed bee-eater, the swallow of the edible nests, hill mynahs, the oriole or mangoe bird, the Malayan species of honey-sucker, &c.

There is no want of fresh water: some considerable rivulets were seen.

Colonel Symes speaks of the natives as the "mild inoffensive Nicobarians." They may be mild; but they seem to be too treacherous and covetous to be inoffensive, especially the people of Nancowry harbour, who have the piratical propensities of the Malays, and "bear a bad character even among their own countrymen."

At Terressa, Mr. Busch found two French missionaries, who gave him an account of the plundering and scuttling of the following vessels:

1. In 1839, at Nancowry, the whaling vessel *Pilot*. H M S *Wanderer* was in 1840, despatched "to avenge this affair." She fired some shots, and burned a few huts; but the natives did not care for such a demonstration. "The only punishment to affect them, would be the destruction of their cocoanut trees."

2. In 1833, at Nancowry, a craft of two masts, commanded by an Eurasian.

3. In 1844, at Nancowry, a vessel of 100 tons, commanded by Captain Caw.

4. In August 1844, at Terressa, the Schooner *Mary*, commanded by Signor Ignacio Ventura, 150 tons.

The crews of the above vessels were all murdered. It is supposed that the Malays who collect edible nests, "instigated some of the massacres." "Purely native crafts, however, have never been known to be attacked; probably because the temptation is not sufficient."

The people of Car Nicobar, who "partake somewhat of the Burmese physiognomy and complexion, 'have the character amongst the English' skippers and other traders, of great honesty and promptitude in their transactions;" that they strictly fulfil their contracts to supply cocoanuts. They are perfectly civilized, compared with the Andamanese. They do not go about in a state of nudity; they speak a little English and Portuguese; their boats and huts

are constructed with great ingenuity ; and they smoke and also use betel, both the nut and the leaf. They are averse to European residents ; consequently, the French missionaries alluded to at Car Nicobar, were obliged to remove to Terressa, carrying with them materials for building a house. The natives of the latter island, however, being "opposed to all innovations," forced them "to abandon their schemes of improvement," and kept them almost as prisoners, in a house thickly surrounded with jungle, where one of them died.

The natives on the North-east side of Great Nicobar also speak Portuguese. They have often been to Nancowry, and even to Penang. Those on the South and South-east side were very shy. At one place, they fled on the approach of Mr. Busch's party. A large Malay building was found among their huts. The inhabitants of another village also fled ; but they came back after a short time, and fowls and plantains were obtained from them. They affected Malay manners.

The Nicobarians are an indolent race. They devote much attention to their cocoanut trees, but to nothing else.

Mr. Busch regretted that he was unable to visit the island of Chowry, for the French missionaries had described it as "the most cultivated and populous, and the people as the most civilized, of this group. Cocoanut trees are, however, very scarce, and the inhabitants are therefore obliged to resort to Terressa, and, by working for their wealthier neighbours, obtain a livelihood. If colonization were attempted, it is more than probable that the services of these men might be secured for the colony. In settling on this island, it would be absolutely requisite to be provided with presses for extracting the oil from the cocoanut ; for by purchasing most of their nuts, the inhabitants would be rendered dependent on the settlement."

The Nicobarians have a superstitious dread of being counted. One writer says that they "probably do not exceed 3,000 or 4,000." According to Thornton, the number is "about 1,000," but this must be a very low estimate, for in Terressa alone, the French Missionaries, who had visited every village on the island, supposed that the total number of inhabitants was 700.

It has been suggested to the writer of this precis by the following passage, which occurs in Busch's Journal, unaccompanied by any comment, that the aborigines of the Nicobars were the same as the present savages of the Andaman Islands, and that they were driven into the interior, and in some instances exterminated, by the foreign and maritime people whose descendants now occupy the coasts : "On inquiring of our native friends from the Little Nicobar," says Captain Lewis, "we are told that the interior of the Great Nicobar is occupied by a widely different race of savages, who are always at war with those on the sea shore. They are armed with bows and arrows ;

and about their cruelty many tales are told." This only corresponds with the statements of ethnologists, that, in the larger islands of the Indian Archipelago, the original inhabitants have retired into the interior before the Malays, who occupy the lower tracts along the coast, and that in the smaller islands they have been extirpated. There is no doubt that the Nicobarians with whom we have become acquainted, are chiefly of Malay extraction.

I am indebted to Mr. W. H. Hoff, of the Foreign Office, for this precis, which has been prepared in pursuance of a wish expressed by the Hon'ble J. P. Grant, and in order to meet the inquiries of His Lordship, respecting the salubrity of the Nicobars, in so far as the means obtainable would permit. The pamphlets alluded to, Lieutenant Blair's report, a precis of information received from the Government of Bengal, with letter No. 25, dated 15th January last, a report by the Officiating Superintendent of Marine, No. 234, dated 13th idem, and the former correspondence, among which is a good report from Captain Hopkinson, are all submitted herewith, but the facts, which these severally contain, as far as connected with the object of the Hon'ble Court's inquiry, are fairly embodied in this precis.

The despatch of an Expedition to explore the islands has been postponed until the cessation of the S. W. Monsoon, and may then be, possibly, still further deferred, owing to the want of a steamer. The Court will be informed by the outgoing mail of this postponement, and the reasons for it. Meanwhile it does not appear that any further steps can be taken, or that any additional information can be obtained.

April 7.

(Signed) G. E.

APPENDIX, No. 3.

INSTRUCTIONS FOR THE RE-OCCUPATION OF THE ANDAMAN
ISLANDS, AS A CONVICT SETTLEMENT.

No. 87.

FROM C. BEADON, ESQUIRE,

Secy. to the Govt. of India,

TO CAPTAIN H. MAN,

Executive Engineer and Superintendent of Convicts at Moulmein.

Dated the 15th January, 1858.

HOME DEPT.

SIR,

It has been determined by the Right Hon'ble the Governor-General in Council to establish a penal settlement on the Andaman Islands, for the reception in the first instance of convicts sentenced to imprisonment, and to transportation for the crimes of mutiny and rebellion and for other offences connected therewith, and eventually for the reception of all convicts under sentence of transportation whom, for any reason, it may not be thought expedient to send to the Straits Settlements or to the Tenasserim Provinces.

2. A Committee, as you are aware, was recently appointed to examine these Islands, with a view to the selection of a site for the above purpose. The Committee, after examining as carefully and closely as possible all the localities in the coast which offer facilities for the establishment of such a settlement, have reported decisively in favour of the old harbour on the East coast of the Great Andaman in N. latitude 11° 42'.

3. A copy of the Committee's report is forwarded for your information. The Governor-General in Council, after attentively considering the reasons given for the selection of Old Harbour, is satisfied that it is a site, if not the best, at any rate admirably adapted for the purpose in view. It is the one chosen as the place of a Settlement by Lieutenant Blair in 1789, known by experience to be salubrious, possessing abundance of wood and water, sheltered from the monsoon, and particularly convenient for the location, separation and management of convicts of different classes.

4. His Lordship in Council has determined therefore that a penal settlement for the objects above mentioned shall be established on the Andaman Islands, and that a commencement shall be made at the Old Harbour, which will hereafter be distinguished by the name of Port Blair, in honor of the Officer who discovered and accurately surveyed it, upwards of 80 years ago, and by whom its advantages were foreseen and appreciated.

5. In forming the settlement and taking the first steps towards carrying out the views of the Government of India (to be presently explained) the Governor-General in Council is desirous of availing himself of your experience in convict management, and I am accordingly directed to request, that, on the receipt of these instructions, you will prepare to proceed as soon as possible in the *Pluto* to Port Blair, in order to make arrangements for the reception of the convicts who will shortly be sent there, and to lay down the details of a plan for their location, employment, and general control.

6. It may be assumed that the class of rebels and mutineers who are sentenced by the Civil and Military tribunals to the secondary punishment of transportation, or to imprisonment, will not include any of the worst offenders, and therefore that the convicts with whom you will have to deal in the first instance, will, for the most part, be men who have been led to the commission of crimes against the state by the example of others, and not men of a desperate or unmanageable character.

7. The Governor-General in Council is, therefore, inclined to think that the bulk of the convicts on their arrival at the settlement may at once be put in a position analogous to that allowed to convicts of the third class in the Straits Settlements, and that the best among them should be promoted at once to a class similar to the second class in the Straits, and employed as Sirdars or Tindals over the others. Degradation to a fourth or lower class, and the imposition of irons, may probably be reserved as punishments for the refractory.

8. The first step to be taken, however, is the selection of a site for the residence of the Superintendent, for a barrack to accommodate the guard of Europeans which it will be necessary to entertain there for some time to come, for a store house, and for such other buildings as may be required. In the opinion of the Governor-General in Council, the best place that can be chosen for this purpose is Chatham Island in the centre of the harbour, and His Lordship in Council considers that no time should be lost in clearing the island and collecting materials for building. Whether the buildings shall be of masonry, or whether they shall be of wood, such as those commonly used in the Burmese Provinces, His Lordship in Council leaves to your judgment. The latter is probably to be preferred,

and, as the climate and other conditions of the island are similar to those of Burmah, it is essential that all buildings should be well raised on piles or pillars, after the fashion usually adopted by the Burmese. You will, on no account, omit this precaution. The clearance of the island should be performed in the first instance by Burmese coolies, either free or convict, whom you can take with you from Moulinein for the purpose, and should be carried on afterwards by the mutineer and rebel convicts on their arrival. Until the island is cleared and houses built, the Superintendent and the guard must remain on board the *Pluto* in the first instance, and afterwards in a guard ship, which will be provided from hence for the service.

9. The Governor-General in Council conceives that eventually, when the Island is cleared and accommodation prepared thereon for the reception of the Superintendent and his guard, the main body of the convicts will be employed in clearing and cultivating the main land contiguous, and that none will be permitted to approach the Island, but the few who may be employed by the Superintendent upon duties which may make their presence there necessary.

10. As long as the Superintendent is obliged to keep his Head Quarters on board the *Pluto* or the guard ship, the rations for the convicts and coolies on shore should be served out over the ship's side to the persons appointed to receive them, and no mutineer or rebel convict should, under any circumstances whatever, be permitted to go on board either vessel.

11. Convict lines should, if necessary, be established at first on Chatham Island, and should consist of temporary huts, to be constructed by the Burmese coolies or the convicts themselves, or of pauls to be supplied for the purpose. The lines to be established on the main land should be huts of a more durable character, to be built by the convicts under the guidance of Burmese artisans, and after an uniform plan suitable to the climate and country and approved by the Superintendent. From the beginning, whether on Chatham Island or on the main land, and whether in the construction of temporary or of permanent huts or houses, you will pay especial attention to providing a good drainage fall. There is no want of water at Port Blair; but it will generally have to be obtained from wells; and the absence of natural drainage by moving streams makes it necessary that this object should be kept in view.

12. The convicts should be organized in gangs of a convenient size, each under the superintendence of a Tindal appointed from among their number, and assisted by a convict peon or two. The duty of the Tindal would be to see that the convicts under him perform the daily task allotted to them, to receive the daily rations and regulate the mess, to bring to the notice of the Superintendent the good or ill conduct of the several convicts composing his gang, and generally to be responsible for their behaviour. In forming the gangs, men

of the same religion may, as far as shall be otherwise convenient, be brought together; but a gang once formed must invariably mess together, and no objection to obey orders on the ground of caste is to be admitted.

13. The Superintendent should never leave the guard ship to go on shore without being accompanied by a sufficient guard. While the convicts are employed upon Chatham Island they should not have any weapons in their possession but those which they use in clearing the jungle. When they are located in the main land, it may be necessary to arm a limited number of them with muskets to keep off the savages.

14. It is not the intention of the Governor-General in Council to propose that you should remain for any length of time at Port Blair. His Lordship in Council wishes you carefully to select an Officer, in or out of the service of Government, in whom you can entirely confide, and to nominate him as Superintendent of the Settlement, for the approval of the Government. With the assistance of this Officer, you are requested to organize the expedition for the purpose of establishing the Settlement, to entertain and arm a sufficient guard, probably of European Sailors trained to the use of fire arms, to collect all the tools and materials you may think necessary for commencing

* Fire wood may be obtained in abundance on the spot. Tobacco should be prohibited, except as a medicine. Seeds and live stock should be provided.

operations, to lay in supplies of rice, wheat, ghee, salt, drugs, and other necessaries,* sufficient for the supply of 1000 convicts for three months, and to engage as many Burmese coolies (free or convicts) as you may think necessary to enable you vigorously to commence and make good progress in clearing Chatham Island and erecting temporary lines, before the prisoners begin to arrive from India. If the *Pluto* is not sufficiently large to accommodate the party or to convey all the stores, you can obtain from the Commissioner, or hire, a small sailing vessel for the purpose. A medical officer should accompany the expedition, and a native doctor to attend on the convicts.

15. After you have put matters fairly in train, and thoroughly instructed the Superintendent in the system you determine to introduce, you will be at liberty to return to your duties at Mouhmein, and thereafter visit the Settlement at intervals: but upon this point you will receive instructions hereafter. The Superintendent will continue for the present entirely under your authority and control.

16. The Commissioner will be instructed to place the *Pluto* at your disposal for this service, and to give you every aid in his power towards the furtherance of the important object in view. It is of the greatest moment that the expedition should proceed without delay, as 218 convict mutineers from the Punjab will shortly leave Kurrachee in vessels which have been directed

to proceed to Port Blair, and will probably be there in a month or six weeks hence.

17. You are requested to submit without delay a sketch of the plan you propose to adopt, and of the strength and cost of the establishment which you think it necessary to entertain. You will also report to the Public Works Department the arrangement you make for the conduct of your other duties during your temporary absence from Moulinein. While you are employed on this special undertaking the Governor-General in Council will allow you Rupees 300 a month as deputation, in addition to your present pay and allowances.

18. A more elaborate expression of your views will be expected by the Governor-General in Council immediately after your first return from the Settlement.

19. There remains one important point upon which, although it does not call for immediate action, it is necessary that you should be in possession of the views of the Governor-General in Council.

20. Many hundred Mutineers and Rebels will before long be established at Port Blair. The congregation of so large a body of male convicts, not held under the strict discipline which can be enforced only within prison walls, is a gigantic evil. It is true that it is one which, in some places has been submitted to from necessities arising out of the position or nature of the Penal Establishment, of the character of the convicts, or other causes. But this is not the case in the Andaman Islands. There is there plenty of room for the wives and families of the prisoners. There is no free community to whom their presence can be objectionable. The character of very many of the convicts themselves will not be that of morally degraded criminals, but of grievous political offenders. There is no reason why the same wise consideration which requires that in the case of free Emigrants to our Colonies the Colony should receive a certain proportion of women as well as men, should not be kept in view in the present instance. You will therefore understand it to be the desire of the Governor-General in Council that eventually the wives and children of some of the Mutineers should follow them from India.

21. That they would do so at once, even if invited, is not likely: nor is it likely that the convicts would wish to be accompanied by them across the "black water;" and the Governor-General in Council has no intention of removing any of them forcibly at present. But it is very probable that with time, and if the permission to be joined by their wives and families be made a reward to prisoners for good behaviour, and limited to a certain number, and if those who deserve the indulgence be allowed to communicate with their homes, the repugnance may on each side cease to be felt. •

22. You will then keep this object before you as an ultimate aim of the Government; not requiring any immediate measures, but to be worked out according to your judgment and the experience of those with whom you will have to deal.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) CECIL BEADON,

Secy. to the Govt. of India

COUNCIL CHAMBER, the 15th January, 1858.

No. 1.

Extracts from the correspondence of the Superintendent of Port Blair, since its re-occupation.

No. 25.—*Read also the following letter from J. P. WALKER, Esquire, M. D., Superintendent, Port Blair, to C. BEADON, Esquire, Secretary to the Government of India.*

I have the honor to report that, having left Calcutta in the Hon'ble Company's Steam Frigate *Semiramis*, on the 1th March, with 200 Convicts, a Native Overseer and two Native Doctors, I reached Port Blair on the 10th idem, without any occurrence worthy of note having occurred, and landed the Convicts.

2. As no provisions existed for the Convicts at Port Blair, I requested the Commander of the Hon'ble Company's Surveying Brig *Mutlak* to receive me on board and render assistance generally, and made a requisition on the Commander of the *Semiramis* for such provisions as he could spare, and requested him to proceed with all expedition to the Commissioner of Moulemin for provisions for the Settlement, with which he returned on the 20th idem, bringing Captain Man on board.

3. Immediately on arrival, the Convicts were set to clear Chatham Island; but it quickly appearing that the supply of water was inadequate, three gangs each of 25 men were sent to Ross Island at the entrance of the Port. The Convicts have generally worked in a satisfactory manner. Chatham Island, where there has been a great deal of miscellaneous work, is nearly cleared, but still a great deal remains to be done in removing roots and levelling ground. At Ross Island a good deal of brushwood has been cut and burnt, but what has been effected is of trifling extent compared with the untouched mass.

4. The magnitude of the task of clearing the primeval jungles of the Andaman Islands can only be appreciated by those who have witnessed the nature of the vegetation and the difficulty of effecting a clearance. The jungle is so dense, and its entanglement by gigantic creepers so complete, as to render it impassable except along the few pathways used by the aborigines. The jungle, so far as known, is continuous, no open plains having been observed. Even when cut, often trees cannot be got to fall without great force, nor brushwood when cut removed, owing to the intricate binding by creepers of great strength. There is great difficulty even during the present dry weather in getting brushwood that has been several days felled to burn, and the largest heaps are constantly extinguished at night by the very heavy dews that fall, drenching everything exposed.

5. The magnitude of the work requires that a very large number of men should be employed on it, to enable extensive clearance and cultivation to be effected within a few years.

6. If left to make my own arrangements for the management and provisioning of the Convicts, I am prepared to receive ten thousand Convicts, during the present year, and at present I anticipate no difficulty in disposing of that number yearly for the next five years, provided that separate settlements under my government be sanctioned at suitable places along the coast of the Great Andaman and its adjacent Islands. Should the Government of India during the present year, experience great difficulty in disposing of a large body of Convicts whether life or term, I may mention that I can arrange to receive double the number I have mentioned, on two months' notice being given me to arrange for the organization of two other settlements; nor need the free establishments for working the Convicts exceed five hundred Rupees per thousand Convicts, in excess of that required for the Head Quarters of the settlement. My unequalled experience of the management of Hindoostani prisoners alone enables me to undertake with considerable confidence the management of so large bodies.

7. Considering all things, I have reason to be satisfied with the general conduct of the Convicts. On the 4th day after arrival, Convict No. 61, Narain, sentenced on the 31st July last to transportation for life for having excited sedition in the Cantonment of Dinapore, where he was a camp follower in the Bazar, after failing in an attempt to excite the Convicts with whom he was working to rebel, attempted to escape from Chatham Island by swimming to the main land, and nearly succeeded. He was made to alter his course by being fired upon, and was captured by a boat's crew. He was at once brought to trial, convicted of sedition and escaping, sentenced to suffer death, and executed. On the same day and about the same time, Convict 46,

Naringun Sing, sentenced at Nuddea to transportation for life, for desertion, committed suicide by hanging himself, without any known cause, at a secluded spot of Ross Island. On the night of the 18th March, twenty-one Convicts escaped on a raft from Ross Island to the main land, in the hope of being able to reach the Continent of India by a narrow neck of land supposed to connect the great Andaman to Burmah. On the 23rd of March, eleven Convicts escaped from Ross Island. They were seen several miles to the south a few days subsequently, and were unsuccessfully pursued. On the 30th March, one of the Convicts who escaped on the 18th idem, delivered himself up to a boat's crew near Chatham Island. He was in a debilitated state from want of food and water, and covered with vermin, that infested even his ears and eyelids, adhering so firmly that he could not remove them. He stated, that having along with others been duped by a fellow-prisoner, who pretended to have held communication with one of the aborigines, who promised assistance on the part of a Rajah, they escaped, and after traversing the south of the Great Andaman by the sea shore, during which they underwent great hardships from want of food, and especially fresh water, were attacked by about one hundred savage aborigines, one of whose first arrows inflicted a mortal wound on the convict-leader. The returned Convict, at the time escaping into the jungle, heard the fight proceeding for some time, and was under the impression that all his companions were massacred. Guided by the morning and evening guns he directed his course towards Port Blair, which he reached in three days, during which he had not met with water. He observed traces of the aborigines in his course hitherwards, but carefully avoided the tracks. His account of the privations he suffered has had a good effect upon the other Convicts, none of whom have since tried to escape. The fate of those who escaped on the second occasion is unknown, but there is little chance of their escaping death, either by hunger or by the hands of savage aborigines, whose hostility to all strangers is most unrelenting, and who at present must be considered unamenable to conciliation.

8. I have arranged for the grouping of the Convicts into gangs of twenty-five, named a section, under a Convict section gangs man; four sections constituting a sub-division under a Convict sub-division gangsmen; and four sub-divisions constituting a division, under a Convict division gangsmen and a free Overseer, accompanied by a native doctor. It is intended that Convicts employed on the main land shall not be worked in less bodies than divisions of four hundred men, as less than that number might be unable to resist attacks by the aboriginal savages.

9. At present, owing to the non-receipt of cash, the Convicts receive

rations, but when the opportunity offers, I purpose introducing cash payments and allowing them to provision themselves from shops managed by Convicts, which will be attached to each division. The goods will be supplied from the settlement stores at fixed prices, on which the Convict shop-keeper will be allowed to charge a certain profit, about 3 per cent. An account current will be kept with the head Convict shop-keeper of each Division, who will be required to make weekly remittances to account. This arrangement will greatly simplify the settlement accounts, economize establishment, prevent wastage, offer an inducement for economical habits, and be an important step towards self-management.

10. At this early stage I can only submit a sketch of the arrangements I propose adopting for the employment of the Convicts: the teachings of a lengthened experience will have to be attended to, and many modifications of detail made. My great object is to offer every inducement to habits of self-reliance and self-management, by so arranging that industry shall bring its own rewards, and idleness its own punishments.

I. Each Convict for a fair day's labour will be allowed a fair day's wages, out of which he must supply himself with food, clothing, cooking utensils, and working implements: medicines and medical comforts being the only necessaries supplied free of cost by Government.

II. The quantity of work required to be performed, and the rates at which stores will be supplied, will enable a Convict to maintain himself on 2 annas per diem, while a sufficient margin in the quantity of work will be allowed to admit of the industrious earning 3 annas per diem, by working earlier and later.

III. When employed on miscellaneous work, prisoners will be paid at the rate of 2 annas each per diem, or Rupees 3 2-0 per section per diem.

IV. When employed in clearing jungle and felling forest trees, prisoners will be required to earn wages by the performance of task work at contract rates.

V. Should a section or part of a section be unemployed by order, or owing to delay of establishment in pointing out new work, or from opposition by the savage aborigines of the Island, or during the transit of working parties to other localities, or from any other necessary cause, the whole or part, as the case may be, of the Convicts of the section will be entitled to receive daily wages at the rate of 2 annas per man per diem, or Rupees 3-2-0 per section per diem.

VI. Convicts will be entitled to receive during sickness in Hospital from the section to which they belong, 1½ annas per diem; but it is optional with the section to allow their sick the full share of its earnings.

VII. When a convict, from lengthened sickness or maiming by accident, is incapacitated from being actively employed, either permanently or for a long time, he will be transferred to an invalid gang, or otherwise disposed of; a healthy prisoner being drafted into the section in his stead.

IX. In the event of an idler existing in a section, it is competent for his fellow laborers by forming themselves into a Panchyat or jury, with their section gangs-man for Vice-President, to decide what reduction on the average share of wages earned by the Section he is to receive. The decision of the Panchyat may be appealed against to the Superintendent, when, in the event of its being confirmed, an additional punishment for idleness will be inflicted.

X. Section gangs-men will receive 4 Rupees per mensem, and a commission of 1 Rupee per cent. on the monthly earnings of their respective Sections. Sub-division gangs-men will receive 4 Rupees per mensem, and a commission of 8 annas per cent. on the monthly earnings of their respective sub-divisions. Division gangs-men will receive 4 Rupees per mensem, and a commission of 4 annas per cent. on the earnings of their respective divisions. When the monthly earnings of a section amount to less than one hundred Rupees, the commission of gangs-men will be deducted from the amount receivable by the section, but when the monthly earnings equal, or exceed that sum, thereby indicating at least average industry, the commission will be paid by Government.

11. By far the most important point in the organization of this Settlement is that of Family Emigration; in fact its success will mainly depend upon inducing a large number of convicts to send for their families to settle here. Convicts with families here are the only men who could be depended upon in time of need, as they would be the only ones who would have a real interest in the colony. For obvious reasons, it is necessary that there should be women in the Settlement. I would therefore strongly urge the advisability of Government offering every facility, especially at present, for the emigration of all families who may be applied for, and taking measures for ensuring their arrival at Port Blair in such a manner as to induce convicts to regard the measure as a boon, instead of anticipating domestic dishonor, having to be persuaded again and again to agree to give the necessary sanction. It is not without great trouble that I have been able to get twenty-five convicts to send for their families; should any misadventure occur to the first despatch, years may elapse ere confidence be sufficiently restored to induce further applications. An agency will be required to visit the families of the convicts at their homes, and assist them to reach the Port of embarkation. I have therefore, subject to confirmation, appointed two Convict Family Emigration Agents, *viz.* Lalla Mundun Singh for Bengal, and Lalla Ram Dyal for the

North-Western Provinces and Oude, each on a salary of Rupees 50 per mensem, with a bonus of two Rupees for each female and juvenile member of a family despatched from Calcutta.

12. I recommend that the Cooly Emigration Agent in Calcutta should be appointed to conduct this very important Department; that the two Convict Family Emigration Agents be under his orders; and that I be permitted to communicate direct with him on all matters of detail.

13. To save time, I enclose Perwannahs of appointment to the two Agents for transmission to them through the Cooly Emigration Agent and the Magistrate of Agra. Should my proposition be approved and sanctioned, it will be necessary that advances be made to the Agents, and this, I suggest, might be done through the Cooly Emigration Agent, who should be required generally to afford them every assistance in their important, but by no means easy, task.

14. Twenty-five inspected letters from convicts to their wives, requesting them to proceed to Port Blair, are enclosed for approval and transmission to the addressees per post or through the Collectors of the districts in which they may reside, and duplicates of the letters are enclosed with Lalla Mundun Singh's Perwannah of appointment, for delivery to the addressees when he may visit them at their houses to arrange for their transmission to the Port of embarkation.

15. The terms I have offered to convicts, whose families may join them are, permission to reclaim and cultivate land free of rent during their own and wife's lifetime; assistance during the first three years (before which the land cannot be expected to yield full crops) to the extent of four Rupees per mensem to the convict for the first year, three Rupees per mensem for the second year, and two Rupees per mensem for the third year, and two Rupees per mensem for each adult female, and one Rupee per mensem for each juvenile member of his family for three years, after which all assistance will be withdrawn.

16. The present Establishment of the Settlement, consists of Captain Man in charge, myself as Superintendent, Mr. Assistant Surgeon Alexander Gamach, M. D. (Madras Establishment,) in Medical charge, Mr. Assistant Apothecary J. Ringrow (Madras Establishment), Nawab Khan and Kurreem Buksh, Native Doctors, Mr. Richardson, and Lalla Matton Daus, Overseer; the Superintendent's Naval Guard, of 50 men, commanded by Lieutenant Templer, I. N., two Hospital Coolies, and a Hospital Sweeper.

17. Lalla Matton Daus and the two Native Doctors accompanied me from Calcutta; Mr. Assistant Apothecary Ringrow arrived on the 20th of March, per *Semiramis*, from Moulmein; Dr. Gamach, Mr. Richardson, and

the Hospital Attendants arrived on the 29th idem, per *Pluto*, from Rangoon and Moulmein.

18. I have to solicit instructions regarding the salary of Dr. Gamach, of Mr. Assistant Apothecary Ringrow, and of the Native Doctors, which I trust may be made as liberal as possible, in consideration of residence at this distant station, where, for a long time, the cost of living will be very expensive, double wages having to be given to servants to induce them to take service here.

19. Mr. Richardson was appointed by Captain Man on a salary of Rupees 200 and his table expenses on board ship, merely to superintend the erection of a barrack on Chatham Island. Believing that Mr. Richardson's knowledge of buildings suitable for this Settlement and his acquaintance with the qualities of forests, and the management of prisoners, will render his services very desirable here, I have appointed him permanently on a salary of Rupees 200, and, while he may remain on board ship, half his table expenses. I have also offered his brother, now at Moulmein, an appointment as Overseer on a salary of Rupees 100 per mensem.

20. The services of Pundit Kesree Dass, Jailer of the Agra Central Prison, would be valuable to me here, as for several years he acted under me, and understands my method of managing convicts; I have reason to believe he would join me as Overseer on a salary of 150 Rupees per mensem, and solicit the favor of the appointment being offered to him.

21. With reference to the memorandum of Establishment submitted by me while in Calcutta, I am satisfied that, high as the rates mentioned for workmen were, they will be insufficient to induce workmen to come here from Moulmein. I would therefore request permission to entertain such subordinate establishment as may be necessary for effectually carrying out the requirements of the Settlement, on such salaries as I can obtain them, as a temporary arrangement.

22. As Captain Man has directed me to return to Moulmein per *Pluto*, some time during the current month, the 50 Burmese Artificer convicts landed here on the 29th ultimo, for the purpose of erecting a wooden storehouse removed from Moulmein, it will be necessary for me to have workmen entertained at Moulmein to carry on the building work of the Settlement, urgently required for the shelter of the establishment and stores.

23. Chatham Island, selected as the head quarters of the Settlement, is inferior in position to Ross Island at the mouth of the Port, which completely commands the entrance, appears to be more healthily situated, is of a more suitable size, and possess a good supply of excellent drinking-water which is so difficultly procurable on Chatham Island as to require, at the

time I write, a supply to be brought to it from the other side of the Port in casks in a boat, I would therefore request permission to select Ross Island for the head quarters of the Settlement, an arrangement, the advisability of which is entirely concurred in by Captain Man.

24. With regard to whence supplies for the Settlement are to be procured, I addressed the following communication to Captain Benson, the S. A. Commissary General at Moulmein: "With reference to our conversation on the subject of whence supplies for the Settlement at Port Blair could be most readily and economically obtained at all seasons, I understood you to say, that the Moulmein Bazar would be quite inadequate to meet the requirements of a large penal settlement on the Andaman Islands; that adequate supplies could only be procured in Moulmein from Calcutta or Madras; that reshipment and a second and often more lengthened voyage would probably more than double the transit charge on the supplies; and that under these circumstances, it would be decidedly preferable to obtain them direct from Calcutta.

"As I am about to address Government on the subject, may I request the favour of your intimating whether I have correctly expressed your opinion?"—to which he favoured me with the subjoined reply: "In reply to yours, No 11, dated 3rd April, 1858: I have the honor to inform you, that, with the exception of rice, all provisions for Native Troops are imported either from Madras or Calcutta to Moulmein; it is therefore obvious that the most economical and expeditious mode of procuring your supplies would be direct from Calcutta." I would therefore recommend that a regular communication with Calcutta be established by a steamer capable of carrying cargo and convicts and convicts' families. A Steamer like the *Pluto* is quite inadequate to meet the requirements of this Settlement, even at the commencement of its growth. A Steamer of the size and power of the *Semiramis*, unincumbered by heavy guns, would suit, and be able to make at least three trips in two months, bringing, in addition to supplies, between two and three hundred convicts or convicts' families per trip. For every thousand convicts fifty tons of stores will be monthly required to be delivered here.

25. A supply of coals has not yet reached Port Blair.

26. The H. C. S. F. *Semiramis* leaves to-night for Moulmein, with Captain Man on board, to bring stores and probably to tow over a vessel laden with building materials.

27. The Transport Ship *Roman Emperor*, which sailed from Kurrachee on the 27th February with 175 convicts, arrived here to-day, and delivered 171, four having died on the passage. A considerable number of the convicts landed are sick and the greater part debilitated to an extent that will prevent

them being efficiently employed for some time.* She will receive her papers and be discharged to-morrow. The *Edcard*

* The conduct of the convicts on board was very good. with convicts from Kurrachee may be expected in a few days.

28. The health of the convicts who reached this by the *Semiramis* on the 10th March, has, considering all things, on the whole been good.

29. A supply of cash is required. Four thousand Rupees in copper coins (including a large supply of *pie*) in addition to the one thousand Rupees sanctioned but not received, and five thousand Rupees in silver coins (including a large supply of two and four anna pieces) will meet the requirements of the Settlement for some time, and I therefore solicit the favor of the required amount being sent on an opportunity offering.

30. The arrival of the *Dalhousie* or *Sesostris* with the bulk of the tools, cash, stationery, miscellaneous stores selected in Calcutta, is anxiously looked for.

No. 119, DATED JUNE 16, 1858.

No. 11.—From Doctor J. P. WALKER Superintendent of the Penal Settlement of Port Blair, to C. BEADON, Esquire, Secretary to the Government of India.

On the 14th instant, the Honorable Company's Steamer *Sidney* left Port Blair for Calcutta, with a Mail containing my letter No. 114, dated 12th idem, to your address.

2. The Honorable Company's Steam Frigate *Semiramis* arrived here this morning with artificers' stores, and cattle from Moulmein, for the Settlement, and having discharged her cargo, will leave for Calcutta early to-morrow morning. This communication will be despatched by her.

3. I have the honor to report that the affairs of the Settlement are proceeding satisfactorily.

4. Subjoined is a statement showing the number of convicts received here since the formation of the Settlement, the casualties that have occurred, and the number remaining to-day.

Received per <i>Semiramis</i> on the 10th March, 1858, from Calcutta	200
Received per <i>Roman Emperor</i> on the 6th April, 1858, from Kurrachee,	171
Received per <i>Edward</i> on the 13th April, 1858, from Kurrachee,	130
Received per <i>Dalhousie</i> on the 15th April, 1858, from Calcutta,	140
Received per <i>Sesostris</i> on the 12th June, 1858, from Singapore and Penang,	132

Total received — 773

Casualties.

Died in hospital,	64
Escaped uncaptured,	140
Suicide,	1
Executed,	87
	— 292
	—
Remaining	481

5. Subjoined is a distribution Statement of the convicts now present

On Chatham Island.

Division Gangsman,	1
Sub-division Gangsman,	2
Section Gangsman,	16
Boatmen,	23
Provision Godown Keepers,	8
Tool and General Store Godown Keepers,	6
Orderlies,	6
Attendants on Sick,	11
Tradesmen—shop-keepers, barbers, tailors, blacksmiths, carpenters, &c.,	12
Writers in Superintendent's Office,	3
Sick in hospital,*	72
Sawyers,	25
Laborers,	158
Total on Chatham Island	— 343

On Ross Island.

Division Gangsman,	1
Sub-division Gangsmen,	2
Section Gangsman	10
Hospital Attendant,	1
Tradesmen,	3
Laborers,	121
	— 138

6. In addition to the 481 mutineer and rebel convicts, there are 57 convicts who were removed from Mouline to assist in erecting buildings. They are at present employed on Chatham Island, and will be returned to Mouline by the first opportunity, as artificers have been received to-day per *Semiramis*. The distribution of the Mouline convicts are as follows. •

* Except slight cases, the sick from Ross Island are received into the hospital on Chatham Island.

	Hindoostanee.	Burmese.	Chinese.
Jemadar,	1	"	"
Tindals,	2	"	"
Peons,	3	"	"
Orderly,	1	"	"
Cook,	1	"	"
Mohurer,	1	"	"
Carpenters, skilled,	"	4	1
Ditto unskilled,	"	12	"
Blacksmiths,	"	"	2
Laborers,	12	17	"
	<u>21</u>	<u>32</u>	<u>3</u>

Of these, four are sick in hospital.

7. Subjoined is a Statement of the convicts treated in the Settlement hospital on Chatham Island, from the first landing of convicts on the 10th March last, up to the end of May.

CLASSES OF DISEASE.	Admitted	Total	Discharged	Dead	Remaining
Fever,	46	46	31	3	9
Diseases of the Lungs,	6	6	4	1	1
„ of the Liver,	1	1	1	0	0
„ of the Stomach and Bowels,	121	121	63	33	25
Rheumatic affections,	17	17	16	0	1
Abscesses and ulcers,	27	27	9	2	16
Wounds and injuries,	10	10	7	1	2
All other Diseases,	36	36	24	6	6
Total,	<u>261</u>	<u>261</u>	<u>158</u>	<u>46</u>	<u>60</u>

Remarks by the Medical Officer.

“Of the 46 deaths, 27 were men who came from Kurrachee, many of whom were affected with scurvy, and several others with dysentery of long standing, previous to their arrival here.”

8. Considering that many of the convicts received were in a sickly and weakly state when received; that the season is unhealthy; that the nature of the work on which the convicts are employed is severe to men unaccustomed to it; and that the clearance of dense jungle in all parts of the world is necessarily unhealthy, I do not think that the amount of sickness and mortality, though great, is greater than might be expected.

9. For the removal of felled timber that is not to be burnt on the spot, the aid of animal labour will be required, otherwise the absorption of convict labour in the work will be so great as greatly to retard the process of clearance and cultivation, and thereby prolong the unhealthiness of the Settlement around Port Blair; I would therefore suggest that the commissariat Officer at Moulmein be directed to furnish four elephants with the suitable harness for dragging logs as employed in Burmah, and also with pads to enable a detachment of the Naval Guard to be carried to any port of the cleared main land, where their services may be required. Mahauts acquainted with the management of the animals would be required to accompany them.

10. In reply to paragraph 19 of your Despatch No. 713, dated 7th ultimo, directing me to report whether any addition to the strength of the Settlement Guard is necessary, either now or when the number of the convicts shall be considerably increased, I beg to represent, that, apprehending the number of convicts will shortly be greatly increased, I think that the present guard of 50 men of the Indian Navy under a Lieutenant and a Midshipman, should be doubled or increased by a Company of Native Infantry, composed of Sikhs and Goorkhas or of Madrassees, under the command of a Lieutenant and an Ensign. Putting aside political expediency, the latter mode of increase appears to me the more useful. Convicts working on the main land must either be protected from the murderous assaults of the aborigines of the island, or furnished with the means of protecting themselves. It appears desirable to avoid the latter arrangement, if possible. The Naval Guard of its present strength, although adequate for the protection of the Officers of the Establishment, the public buildings and the stores at the Head Quarters of the Settlement, and also to furnish a personal guard to the Superintendent when away on duty, is inadequate to furnish an advanced guard for convicts working in the jungle, and even if strengthened, would be unsuited to withstand the exposure alike to the weather and the fever-producing jungle exhalations. For such service, Native Soldiery would, I think, be more suitable.

11. Supposing Native Soldiery to be employed, it would be very desirable that they should be accompanied by their families, and have an interest in the Settlement by having an assignment of land made to them. Perhaps it would be impossible to induce a company of Soldiers of the line, even Madrassees, to bring their families to settle here; but, should the suggestion of raising a Local Company as the nucleus of a corps of Soldier-settlers be favourably entertained, I perceive no great difficulty in carrying out the measure within twelve months; but in the interval, arrangements for strengthening the guard require to be made.

12. As it appears to me that it is not desirable that this should be exclusively a convict Settlement, but that the introduction of free settlers into the colony would exercise a salutary influence, I solicit the favor of being put in possession of the views of Government on the subject. I understand that several of the artificers just arrived from Moulmein, are desirous of sending for their families; an arrangement to which, I apprehend, there can be no objection. Should any of them feel disposed to become settlers, I cannot treat with them, until I know how far the measure would meet with the sanction of Government.

No. 176, DATED JULY 3, 1858.

No. 5.—From Doctor J. P. WALKER, Superintendent of the Penal Settlement of Port Blair, to C. BEADON, Esquire, Secretary to the Government of India.

In my last communication, No. 119, dated the 16th ultimo, despatched per Hon'ble Company's Steam Frigate *Semiramis* on the 17th idem, I had the honor to report that the affairs of the Settlement were proceeding satisfactorily, and I have now the pleasure to report that they have continued to do so during the interval.

2. This communication will be despatched per coal and store Barque *Alma* to Moulmein.

3. On the 1st instant, the Screw Steamer *Italian*, with 80 convicts for Port Blair from Bombay, arrived here, and having landed 79, (one having been accidentally drowned during the voyage,) was despatched on the same day, to continue her voyage to Singapore with convicts. The *Italian* also brought three months' stores for the convicts landed here. I have reported to the Secretary to the Government at Bombay, the arrival of the *Italian*, and the accidental death of one of the convicts, supported by certificate.

4. I am anxiously awaiting the arrival of further despatches of convicts to enable Ross Island to be cleared, and get under cultivation by the end of the South-west Monsoon, and then recommence work on the main land.

5. I think Chatham Island will be completely under cultivation by the end of the present month, unless heavy rain should interrupt the work. Still, however, much will remain to be done in digging a tank, making roads (which require to be raised), constructing a jetty, and clearing the shore.

No. 191, DATED JULY 8, 1858.

No. 6.—From Doctor J. P. WALKER, Superintendent of the Penal Settlement of Port Blair, to C. BEADON, Esquire, Secretary to the Government of India.

In my last communication No. 176, dated 3rd instant, despatched per coal and store Barque *Alma* to Moulmein, I had the honor to report that the

affairs of the Settlement were proceeding satisfactorily, and I have now again the pleasure to report that during the interval they have continued to do so.

2. This communication will be despatched per Barque *Edward*, proceeding to Moulmein, with the fifty-seven convicts received from Moulmein, to assist in the erection of a building on Chatham Island.

3. On the 16th June, fifty-five free artificers were received from Moulmein for the erection of the Settlement buildings. Although receiving high wages, very few are good, none first-rate workmen, and 28 having on trial been found useless as Carpenters, were returned per Barque *Alma* on the 4th instant to Moulmein.

4. The engagement of the Barque *Edward* expires on the 16th instant, I have taken advantage of the remainder of her engagement to convey the Moulmein convicts to Moulmein, the only extra expense incurred being one hundred rupees, in consideration of medicines, and a compensation from the use of fire-arms during the voyage. The crew of the *Edward* having guarded 133 convicts from Kurrachee, are considered adequate to guard the Moulmein convicts about to be despatched.

5. At one time I intended to employ the *Edward* during the remainder of her engagement in transporting building materials, but as I found that she would not have returned within her present engagement, another would have to be entered into. I thought it would be better not do so, as I understand, freights being low, a smaller vessel could be more economically engaged by Captain Man at Moulmein.

6. Learning that I was more likely to get a supply of thatching leaves and mats from Tavoy than from elsewhere, on the 17th April, I despatched the H. C. Steamer *Pluto* to Tavoy, with a letter to the Deputy Commissioner requesting his aid in procuring supplies. He lost no time in complying, and on the 1st of May despatched a Chinese Junk to Port Blair. The Junk was towed out to sea by the *Pluto*, and after sighting the Andamans, was obliged by stress of weather to return and discharge her cargo at Tavoy, where it now remains. The loss by freight, &c., will not be less than Rupees 2,500. As the thatching and building materials were urgently required for the shelter of the convicts during the then approaching monsoon, I thought I was warranted in doing my best to procure them, as the weather was favourable, and the arrival of the *Dalhousie* admitted of the departure of the *Pluto*. The thatching leaves and mats being still urgently required for the roof and sides of a large Hospital, 200 x 36, being erected on Ross Island, and for other buildings, I purpose to despatch the first available steamer to bring them over from Tavoy.

7. There is still considerable sickness, attended with great mortality.

Last month 56 convicts were admitted into Hospital, and 37 deaths occurred. Since the removal of the sick to Ross Island during the last few days there is a marked improvement in the appearance of the sick. Double-roofed tents, the same as those allowed to European Soldiers, have throughout been allowed to the sick, who lie on raised benches, but I anticipate that they will be much more favourably circumstanced when the new Hospital, the floor of which will be four feet from the ground, shall be ready for occupation on Ross Island. The cause of the great sickness is principally dependent on the unhealthy nature of their employment, as both Europeans and natives, residing on board ship, are very healthy. As the jungle gets opened up and cultivated, sickness may be expected to decrease, and not until then. Great sickness and mortality has always resulted, when dense jungle has been undergoing clearance, so far as I can learn, and the clearance of the excessively dense primeval jungles of the Andamans, is not likely to be an exceptional case. The rapid opening up of the jungles, to allow of the dispersion of malaria and keeping the reclaimed land under cultivation, without which, jungle would speedily re-form, are the only radical remedies that I can suggest. At the same time, the convicts should be placed in as favourable circumstances as possible, to resist the unhealthy influences by which they are surrounded. This I have studied to effect. They have been supplied with tents and tarpaulins until otherwise provided for; they have been supplied with the means of procuring a plentiful and varied supply of food, including vegetables; they have not been required to work during rain, they are allowed from 11 o'clock A. M. till 2 o'clock P. M. to bathe, prepare their food, and rest; the seventh day is to them a day of rest, they are, with a few exceptional cases, unfettered; in sickness the Hospital is freely open to them, with its staff of an Assistant Surgeon, Apothecary and two Native Doctors. If with these advantages so great sickness and mortality exists, what might be expected under a severe penal discipline? To-day when I visited the Hospital, there were 67 sick under treatment for the undermentioned diseases:

Chronic Dysentery,	25
Diarrhœa,	7
Piles,	1
Prolapsus Ani,	1
Intermittent Fever,	1½
Rheumatism, Chronic,	2
Scurvy,	3
Debility,	1
Contusion,	2
Boils,	3

No. 213, DATED JULY 20, 1858.

No. 25.—From Doctor J. P. WALKER, Superintendent of the Penal Settlement of Port Blair, to C. BEADON, Esquire, Secretary to the Government of India.

In my last communication, dated 8th instant, No. 191, despatched by the Barque *Edward* to Moulmein, I had the honor to report that the affairs of the Settlement were proceeding satisfactorily, and I have again the pleasure to report that during the interval they have continued to do so.

2. This communication will be despatched per Honorable Company's Steamer *Coromandel*, which leaves for Madras to-morrow afternoon.

3. The *Coromandel*, commanded by Lieutenant R. A. Stradling, I. N., arrived here last night from Calcutta, with an addition to the Naval Guard, convicts' stores, and a mail.

4. Of 149 convicts shipped on board the *Coromandel*, 148 were landed to-day on Ross Island, one having died during the voyage, about the time of arrival here.

5. The Naval Guard has been strengthened by the addition of thirty men, and Lieutenant Templer commanding has represented that it is very desirable that with the increase of men, there should be added another officer. As Captain Campbell, the Senior Naval Officer of the Indian Navy, seems to have anticipated the necessity by intimating to Lieutenant Templer, that if the services of Mr. Midshipman King (who has been acting during Mr. Midshipman Frimes's absence) are required for the Settlement Guard, he may remain till relieved by another officer, I have complied with Lieutenant Templer's application, and requested Lieutenant Stradling to allow him to remain here. I am of opinion that the efficiency of the Naval Guard will be better secured by an increase of warrant officers than by the addition of Midshipmen.

6. With reference to the concluding sentence of para. 2 of your letter, No. 1079 of the 12th instant, intimating that "it is imperative that the convicts should be properly sheltered from the weather during the monsoon;" and para. 6, of my letter No. 191 of the 8th instant, representing that "the thatching leaves and mats being still urgently required for the roof and sides of a large hospital, 200 feet x 36, being erected on Ross Island, and for other buildings, I purpose to despatch the first available steamer to bring them over from Tavoy," I would have despatched the *Coromandel* to Tavoy, had your orders in letter No. 1601 to the Senior Naval Officer, Indian Navy, not been that she should proceed from Port Blair to Madras without delay. I trust, however, that the next steamer may be available, as owing to the non-receipt

of any portion of the 3,000,000 thatching leaves indented for on the 16th April last from Tavoy, Mergui and Moulmein, I have not been able to shelter the convicts on Ross Island in a satisfactory manner.

7. From para. 2 of your letter, No. 1079, it appears that the Hon'ble the President in Council is under the impression that I have been adequately supplied with building materials, I beg to represent that although I indented on the 6th April last on Captain Man for large supplies of building materials for the construction of public buildings (residences for Officers and Overseers, —barracks for the Guard offices, and store-houses), I had not, up to the end of May, received a sufficiency to complete a store-house on Chatham Island, although green wood entered largely into the construction. Its supports are of green jungle wood, the framing and sides of the upper portion are all the remains of two decayed buildings from Moulmein, and the roof is covered with new shingles, (to the extent they were available) and weather boarding. During June I received a supply of shingles, weather boards and planks from Moulmein, which would only partially suffice for the Superintendent's bungalow, but as seasoned wood for supports and framing has not been received, the construction cannot be commenced.

8. But even if the seasoned material were at hand, the workmen supplied to me from Moulmein are quite unfitted from want of skill to perform the carpentry work. Para. 3 of my letter No. 191, dated 8th instant, reported the qualifications of the workmen, the return of 28 as useless, and the inferiority of the remainder. I have not more than two carpenters who could be entrusted to make a house door without spoiling the material. Some of the men hardly know how to handle the commonest tools, and are not fit to work up good seasoned material without spoiling it. I have had great experience in constructing buildings in the North-Western Provinces, and I am certain that there a carpenter on three annas a day would do as much work as three of the men I have, and the work would be done in a workman-like manner. With reference to your letter No. 987, dated 25th June, and enclosures on the subject of artificers, I quite agree with Doctor Mouat's view as expressed in para. 3 of his letter No. 168, and as para. 2 of letter No. 987 informs me that men of the description required can be hired and sent from Calcutta, I am about to request the Superintendent of Marine to send down 30 carpenters and 10 blacksmiths. The proportion of the latter to the carpenters is much greater than is required for constructing buildings, but they are required to keep the convicts' working tools in order.

9. In para. 10 of your letter No. 743, dated 7th May, the appointment of Mr. James Richardson as Overseer on Rupees 100 a month was sanctioned. As his appointment by me was contingent on his acceptance and departure for

Port Blair by the earliest opportunity, neither of which he fulfilled, I intimated to him on the 9th instant, that "having failed to comply with my specified requirements, I now declined his services." Captain Mau, under whom he had been serving, having been dissatisfied with his negligent conduct, intimated to him that he did not think he would suit me.

10. I beg to urge the appointment of a Deputy Superintendent, as the nature of the duties required of me here require that I should be assisted, and so that in the event of sickness, there may be an efficient officer, in addition to the native Overseer, to conduct the work of the Settlement.

11. The present number (two) of native Doctors is inadequate. One is detached on Clatham Island, and the other attends the sick in Hospital now on Ross Island. I beg to recommend that two more be sent by the first opportunity.

12. A few convicts of the sweeper or Bhungee caste are very much required for the sick in Hospital, especially for those suffering from bowel-complaints, and unable to move from their beds. At present, there is only one free sweeper; who is not able, (even were he willing to attend on convicts, which he is not,) to perform a tithe of the work required, and the consequence is, that the sick are put to great inconvenience, and the Hospital is often unpleasant.

13. In para. 7 of letter No. 119, dated 16th ultimo, I had the honor to submit a statement of sickness among the convicts from their first landing on the 10th March up to the end of May, and I now subjoin a corresponding statement from the end of May up to the present date, (20th July).

Classes of Disease.	Remained 31st May 1858.	Admitted since.	Total treated during interval.	Discharged.	Died.	Remaining 20th July. 1858.
Fevers,.....	9	20	29	15	7	7
Diseases of the Lungs,	1	3	4	1	1	2
" of the Liver, .....	..	..	..	..	..	..
" of the Stomach and Bowels,	25	60	85	25	30	30
Rheumatic Affections,	1	3	4	1	1	2
Abscesses and Ulcers,.....	16	7	23	6	9	8
Wounds and Injuries,	2	6	8	3	1	4
All other Diseases,	6	20	26	14	4	8
Total,.....	60	119	179	65	54	60

14. Subjoined is a statement of the quantity of rain that fell, as indicated by the Pluviometer, from the 1st June to the present date.

JUNE.		JULY.	
1	2.15	1	0.00
2	1.35	2	0.00
3	1.05	3	1.55
4	2.65	4	1.35
5	0.00	5	0.95
6	1.05	6	1.25
7	0.00	7	1.35
8	0.00	8	1.25
9	0.00	9	1.55
10	0.00	10	1.35
11	1.05	11	1.75
12	1.35	12	1.65
13	1.15	13	1.05
14	2.15	14	2.55
15	1.65	15	1.35
16	1.55	16	1.95
17	0.00	17	1.45
18	0.00	18	1.05
19	0.00	19	0.85
20	0.00	20	1.35
21	1.15	21*	0.00
22	0.00	22	0.00
23	0.00	23	0.00
24	0.00	24	0.00
25	0.00	25	0.00
26	0.00	26	0.00
27	0.00	27	0.00
28	0.00	28	0.00
29	0.00	29	0.00
30	0.00	30	0.00
Total from June... 18.30		Total from 1st to 20th... 25.60	

N. B.—The indications are read at 6 A. M., and indicate the fall of rain during the preceding 24 hours.

P. S.—As the *Coromandel* does not sail for Madras until to-morrow morning, I avail myself of the opportunity to report that all continues well here.

* From 6 A. M. to 3 P. M., 2.95 inches of rain fell, making a total of 28½ inches during the current month.

No. 242.

FROM J. P. WALKER, Esq. M. D.

Superintendent, Port Blair, Andamans,

TO C. BEADON, Esq.,

*Secretary to the Government of India, Home Dept.**Dated Ross Island, 8th August, 1858.*

SIR,—The last communication I had the honor to address to you on the state of the Settlement was letter No. 213, dated 20th ultimo, despatched by Hon'ble Company's Steamer *Coromandel* proceeding to Madras.

2. In the interval there has been no communication with the continent of India or elsewhere.

3. As Her Majesty's gun vessel *Roebeck* leaves Port Blair for Moulmein to-morrow morning, I avail myself of the opportunity to report that the affairs of the Settlement continue in the same state as reported in my last communication.

4. The tents occupied as a Hospital on Ross Island having become thoroughly rotten from the continued rainy weather, and torn by the wind, it was necessary a few days ago to re-establish the Settlement Hospital on Chatham Island where there is a building capable of affording shelter to the sick.

5. In para. 13 of letter No. 213, I submitted a statement showing the amount of sickness amongst the convicts up to the 20th July, and I now subjoin a statement in continuation up to the present date.

Classes of Diseases.	Remained on the 20th July, 1858		Admitted since.	Total.	Discharged since 20th July, 1858		Died since 20th July, 1858.	Remaining 8th August, 1858.
Fevers,	7	19	26	6	1	19		
Diseases of the Lungs,	1	3	4	...	3	1		
Diseases of the Stomach and Bowels,	30	27	57	20	6	31		
Rheumatic affections,	2	4	6	1	...	5		
Abscesses and ulcers,	8	8	16	5	3*	8		
Wounds and Injuries,	4	1	5	3	...	2		
All other Diseases,	8	8	16	4	2	10		
	60	70	130	39	*15	76		

* Includes a case of suicide by drowning, the convict having been a patient at the time.

6. The weather has been rainy and stormy.

7. The health of the Naval Guard has suffered from exposure at night, while guarding the channels between Chatham and Ross Islands, and the main land. Though the Guard Boats have rain-awnings, the men frequently get wet. I try to save the men as much as possible from exposure, compatible with efficiency. Sores on the legs are very prevalent here: convicts and seamen, European and native alike suffer from them. The Surgeon of H. M. Gun vessel *Roebuck* informs me that they are very prevalent on board that vessel.

8. From the 24th of April till the 24th July no escapes occurred, but on the night of the latter date four convicts escaped from Ross Island, viz.:

No. 836. Soobannah, life-convict, sentenced for rebellion, and received ex *Italian* on the 1st July.

No. 762. Pandoo, life-convict, sentenced for mutiny and received ex *Sesostris* on the 12th June.

No. 781. Kutt Beg, life-convict, sentenced for instigating rebellion, and received ex *Italian* on the 1st July.

No. 834. Krishna Chowhan, life-convict, sentenced for treason and received ex *Italian* on the 1st July.

They were last seen on the night of the 24th July and were missing at muster on the following morning, one or two pieces of sawn wood used for railing posts and several small pieces of rope were found missing from the saw-pits on the sea-side. This induces the belief that the convicts used them to effect their escape. On the other hand, it is known that three out of the four missing convicts were weakly men, and one was very markedly so, and as the wind was blowing fresh across the channel towards Ross Island, it is doubted whether they could have crossed the broad channel against the wind, either by paddling on small pieces of timber or by swimming. I searched the opposite shore for three quarters of a mile without finding any trace of a raft. It is therefore probable that they either committed suicide by drowning, or were drowned in an attempt to escape across the channel. With a view to relieving the men of the Naval Guard whenever possible, it was not deemed necessary to despatch a Guard-Boat in advance of the *Sesostris* as usual, as the night was clear and windy.

9. A case of suicide by drowning occurred this morning. Convict Mundraj Gir No. 901, landed on the 20th ultimo ex *Coromandel*, was admitted on the following day into Hospital with an ulcer of the leg, and continued a patient therein till the time of his death. Between 6 and 7 o'clock this morning, he left the Hospital, and was seen to walk into the sea on the North side of Chatham Island and deliberately drowned himself. Several convicts endeavoured to induce him to return to the shore, and threw in pieces of wood to aid

him ; but he refused to avail himself of them. Mr. Asstt. Apothecary J. Ringrow rushed into the sea to his rescue, but as the convict was evidently bent on drowning himself, he did not think it prudent to risk his life by placing himself in the grasp of such a person in deep water. The deceased was carried out into deep water, soon sank, and disappeared. No cause is known for the act.

10. To-day 654 convicts are present, of these 474 are located on Ross Island and 180 (including all the sick of the settlement) on Chatham Island.

11. Overseer Taylor who came in charge of the convicts brought by the *Coromandel* is still here until an opportunity occurs for his return. He has only been able to be employed on shore on a few occasions, as he suffered at first from a sore foot and afterwards from Rheumatism.

12. With reference to the concluding part of para. 15 of your letter, No. 1079, I am very desirous that a permanent Overseer should be sent from Calcutta in place of Mr. Richardson.

I have the honor to be, &c.

(Sd.) J. P. WALKER,

Supdt Port Blair.

APPENDIX No. 4.

**EXTRACTS FROM PUBLISHED AND UNPUBLISHED
ACCOUNTS OF THE ANDAMAN ISLANDS.**

LIEUT. COLEBROOKE'S JOURNAL OF A VOYAGE TO THE
ANDAMAN ISLANDS (1789-90), PRINTED VERBATIM
FROM THE ORIGINAL MANUSCRIPT.

1789.

- ⊙ 29th Nov. Left Calcutta and embarked on board the "Yacht."
▷ 30th.....Passed Diamond Harbour.
♂ 1st Dec. ...Arrived on board the "Atalanta" Sloop of War.
h 5thSailed from Saugor Roads at 10 A. M.
♂ 8thBecalmed during the greatest part of the day and the whole
night.
♀ 9thLight airs from N. E. in the morning, saw land, being part of
the coast of Ava.
h 12thWe altered our course more to the southward.
⊙ 13thCoasted along the land at about three leagues distance. It
appears to be a wild country covered with wood. It has a
steep and rocky shore. There were many rocks which
seemed to be detached two or three miles from the beach.
The most remarkable of these are called the Buffaloes.
We passed Cape Negrais at about 1 P. M. This is the
southernmost extremity of the coast of Ava. At about 2,
the Commodore made a signal for anchoring, and we *came*
to shortly after, in about five fathoms, having Diamond
Island about four miles to the southward. The intention of
stopping here was to catch turtle, which are found in great
plenty at this place. At night a party from the "Ariel"
went on shore. They walked round the Island in the dark, and
overturned forty-five large green turtles, which they found
upon the beach. This is the usual manner of taking these
animals, as they never appear on shore during the day.
The next morning not above twenty-five were found, the

rest having turned again and made their escape. This Island is the most remarkable place in the Bay for turtle, and produces the species which is called *Green*, superior in size and flavor to any other.

♂ 14th Dec....This morning I went on shore upon Diamond Island, in company with Captain Kyd and Captain Moussum of the "Ariel." We found the landing rather difficult on account of the rocks and stones which surround the Island. Captains K. and M. measured a base and took some angles with a theodolite, to ascertain the position of Cape Negrais and other Headlands upon the coasts. We observed the Latitude of the Island with our sextants.

☉'s Mer. Alt,	50	41	40		
Dip for 9 feet.,	0	2	52		
	<hr/>				
	50	38	48		
Refn.,	0	0	47		
	<hr/>				
	50	38	01		
Semidiamr. +	0	16	18		
Parr. +	0	0	6		
	<hr/>				
Cort. Alt.,	50	54	25		
	<hr/>				
Z. D.,	39	05	35	23	16 53
Decln.,	23	16	2	0	0 51
	<hr/>				
Latitude,	15	49	33	23	16 02
By Capt. Kyd's Obs.					
the latitude was,...	15	49	43		

Mean latitude of Diamond Island $15^{\circ} 49' 38''$

♂ 15th Dec....In the morning, we sailed with a light breeze at East. About 1 p. m. the Commodore made a signal for Captain Delgamo to come on board. He went and received orders to remain at Diamond Island with the "Atalanta" for a few days, to catch turtle for the Squadron. He said he would proceed himself with the "Perseverance" and "Ariel" to the Andamans, and that he should there wait for him in Port Cornwallis. In compliance with the Commodore's orders, we stood in again for the land, and anchored in the evening.

- ♂ 16th Dec. ..Weighed at 8 A. M. to get nearer the Island. Becalmed at 12, and let go an anchor. At 3 a breeze from N. We stood in for the Island and *came to* at 6 o'clock. Sent two boats on shore with a party of men to catch turtle.
- ♂ 17th Dec....In the morning they came back with the news that they had turned over and secured forty-two in the course of the night. The wind blew fresh from the northward all day, which prevented our getting more than fifteen turtles on board. It blew a fresh gale all night.
- ♀ 18th Dec....Fresh gale all day. Seventeen turtles were caught last night, but few could be brought on board on account of the strong wind. The "Viper" Snow arrived from the Andamans.
- ♂ 19th Dec. ..Wind subsided. Forty-three turtles were caught on shore. We have now caught altogether one hundred and two large turtles in three days. This is an astonishing stock of fresh provisions for the Squadron. Each turtle is sufficiently large for the consumption of our whole ship's company in a day, and we have one hundred and twenty-five men on board.
- ⊙ 20th Dec ...This morning, the boats came off from Diamond Island with the remainder of the turtle. They were so numerous last night that we might have got fifty or sixty in addition to our stock ; but had not room to stow any more. We sailed from Diamond Island at about 11 o'clock.
- ♂ 21st Dec. ..At day-break this morning we found ourselves about three leagues to the westward of Preparis Island. A fresh breeze springing up, we soon were out of sight of this land. At about 11 o'clock, the man at the mast head discovered the *Cocos* Islands *ahead*. We *hauled our wind* a little, to get to windward of them. Latitude at noon observed by Mr. Watt, $14^{\circ} 22'$. Wind N. E. In the evening we had passed the Cocos and were in sight of Narcondam, about twenty leagues, E. S. E.
- ♂ 22nd Dec. In the morning we saw the *Saddle* mountain upon the Great Andaman Island. We steered south during the whole day and passed the cluster of Islands called Archipelago, on the East side of the Great Island. They are all covered with wood, and some are surrounded by rocky cliffs. About 6 P. M. we weathered the southernmost of these Islands and bore away W. by S. for Port Cornwallis ; but night

coming on the Captain thought it best to lay to for the night, and not to run into a strange Harbour in the dark.

- 8 23rd Dec. . About four in the morning we made sail and entered the Harbour called Port Cornwallis at about 8 o'clock. Here we found the "Perseverance" and "Ariel" at anchor; likewise the "Ranger" and "Viper," which last vessel had overtaken us and run in during the night.

We found several springs of fresh water on shore and immediately sent our boats with the empty casks to be filled.

- 7 24th Dec. . Captain D — and my-self went up the Harbour in a boat to the distance of about 3 miles. We saw upon a rocky point about twenty or thirty of the natives; they appeared to be quite naked and besmeared with mud.

- 9 25th Dec.... Went on shore upon Chatham Island to take views. This is a very small Island near the entrance of the Harbour where Mr. Blair, the Marine Surveyor, has lately erected a small house with wood and canvass. He has already cleared away a great deal of the wood on the Island, and planted a small garden.

- 5 26th Dec. . Went in company with Commodore Cornwallis up the Harbour. We had in the barge one of the natives, who some time ago, had been taken in a skirmish by the people of the "Viper." He had the mark of a pistol ball which has gone through his nose, and put out one of his eyes. He appeared to be very cheerful, and quite reconciled to his captivity. It appears, that when the "Ranger" and "Viper" brigs first entered this Harbour, the natives were extremely hostile: they attacked the boats which went ashore for water, and even ventured to approach the vessels and discharged their arrows at them. One of the crew had an arrow shot through his shoulder, and probably some would have lost their lives, had not the timely discharge of two or three muskets put a stop to their attack. In one of these skirmishes a native was unfortunately killed; upon which the rest ran off, making the most doleful lamentations.

We sailed up to the furthest extremity of the Harbour about five or six miles and entered a creek which had the appearance of a river; but when we had rowed up about two miles through mangroves and thickets, and not finding the water in the least sweeter, we concluded that it was only a

Salt creek, which probably terminated a little further. The shores on each side werelined with mangroves; except in two or three places, where the ground was high and covered with trees. We went ashore to look at a hut which appeared to be inhabited; but we found it deserted. It was a most wretched little shed, built of sticks and leaves. We found in it some bones, which appeared to be those of a wild hog, suspended to the roof by strings. The ground about the hut was strewed with the shells of oysters, muscles, cockles and other shell fish. In returning down the creek we discovered one of the natives in a tree. The instant he perceived us he ran down with as much agility as a monkey, making a great noise and calling to two others who were below. One of them we took to be a woman, by her voice, as we could not see her. The Commodore threw ashore two or three cocoanuts as a token of friendship; but the boat being very near the shore they did not venture at first to pick them up. We rowed away a little, and one of them came slowly towards the cocoanuts till, being near enough, he snatched them up eagerly and ran off. It appears that cocoanuts do not grow here; at least we have not yet discovered any. Those which were given to the natives were brought by the "Ranger" from the *Nicobars*. We dined on our return upon a small hill which had been called Mount Pleasant. It commands an extensive view of the harbour and the country around. In the afternoon we returned towards the ships; but seeing one of the natives on shore, we stoped a few minutes to hold a conference with him. He was a man of the middle size and tolerably well-shaped. His wool was rubbed with a kind of red earth, and the rest of his body smeared with mud. He wore round his neck and left arm a kind of ornament which looked like a fringe of dried grass. He appeared very cautious of approaching us; probably, for fear of being seized; however, he allowed Mr. K. to draw near him, and readily exchanged his bow and arrows for a knife which was presented to him. He had under his arm a small basket into which he deposited every thing that was given to him. We gave him some handfulls of biscuit, and, on rowing away, we saw him sit down on the rock and eat of it with great avidity.

- © 27th Dec....This morning the "Ranger" Snow sailed for Bengal. She was sent with despatches by Commodore Cornwallis to the Governor-General of Bengal. A native who had been on board of this vessel about three weeks, and who appeared to be perfectly reconciled and pleased with his new mode of living, was left on board of our ship. At the same time the Commodore gave orders that, if he wished to go on shore and return to his countrymen, an opportunity should be given him to desert; he was accordingly put into a boat and sent ashore. There happened to be at this time a few of the natives in sight, and we desired him to go and join them. He seemed to be actuated by a sudden impulse of joy at seeing them. He sprung out of the boat and flung down his hat and ran towards them. They did not immediately recognize him for one of their countrymen, as he had been clothed on board the "Ranger" with a jacket and trowsers. He soon disencumbered himself from his clothes, and returned to that state of nature which he had from his infancy been accustomed to. They immediately seemed to congratulate him upon his safe escape, and they all together ran into the woods.
- ▷ 28th Dec....Nothing material occurred this morning. In the afternoon the Commodore, &c., rowed toward the rocky point, and held a conference with the same native whom we visited on the 26th. He was sitting upon the rocks with a fire, at which he had been roasting some shell fish. He was attended by a woman and girl, both perfectly naked and their skins daubed with mud.
- ♂ 29th Dec....This morning the natives shewed an inclination to be very hostile and mischievous. The Commodore had an interview with several of them in a little Bay on the Eastern side of the Harbour. They appeared at first perfectly good humoured. Presently a man armed with a bow came down from the wood apparently very much enraged. he made a great noise and harangued them, as if to spur them on to an attack. He discharged an arrow himself, and his example was immediately followed by all the rest, above fifty arrows flew over the boat and one went through the *awning*. Our people fired a musket over their heads. Luckily no person in the boat was hurt and the Commodore, not wishing to take advantage of the superior efficacy of

our muskets, prevented our men from firing at them and rowed away. Some people from the "Ariel" were also attacked near their watering-place, and, seeing themselves closely pressed, were obliged to discharge two or three muskets, by which one of the natives was killed upon the spot.

We dined upon Mount Pleasant and rowed towards the rocky point after dinner. Here we found about twenty of the natives assembled. Some drew back into the woods with their bows and arrows, others picked up stones as if to annoy us. They shewed by their actions a great inclination to be troublesome; but seeing two muskets ready to fire they remained quiet, and we returned to the ships.

8 30th Dec. . The "Perseverance" returned to her old anchoring ground. The "Ariel" got under way to get nearer the mouth of the Harbour and ran aground upon a shoal, but got off again in the afternoon.

The Lat. of Port Cornwallis by Mr. Blair is 11-38-30.

7 31st Dec.... Sailed from Port Cornwallis, we had a fine breeze at N. E. In going out, we shaped our course about south for Carnicobar Island.

Latitude at noon 11-20.

We passed in the afternoon the *Cinque Islands, Brothers*, and *Little Andaman*.*

1790.

© 21st Feb.... About sunrise we passed the Brothers Islands to leeward. They appear to be low and covered entirely with wood. About eleven o'clock we weathered and passed the Easternmost of the Cinque Islands. These are high rocky Islands covered with trees and brushwood, they do not appear to be inhabited and some of them are hardly accessible.

Latitude 11-15-07.

At the time the sun was up the middle of the greatest Cinque Island bore west, therefore its Latitude is the same as observed above.

In the evening arrived at Port Cornwallis in the Great Andaman Island. We landed upon a small Island in the middle of the Harbour where a settlement is beginning to be formed. This place has been called Chatham Island.

* They visited the Nicobar Islands, returning to the Andamans on the 21st February, 1790, where the journal is again taken up.

♀ 19th Mar. Sailed from Port Cornwallis about 9 o'clock at night with the land wind.

♂ 20th Mar. Standing off and on with the shore.

Latitude 11-50-45.

Anchored in the evening at the mouth of an Inlet or Bay, which had the appearance of a good Harbour.

○ 21st Mar. We rowed up the Inlet, which appears to run four or five miles inland, in a southwest direction. Indeed we could not see the end of it, so that perhaps it may extend much further. There is an Island at the mouth of this Bay, about two miles in length from E. to W. and one mile broad. We went round the Island and entered the Bay to the northward. Here it had the appearance of a tolerable good Harbour with soundings from six to eight fathoms. Within the large Islands we found two small ones, one of which produces fine oysters in abundance. We anchored in the afternoon within a quarter of a mile of the latter.

♂ 22nd Mar. At day-break we weighed anchor and stood out of the Bay with the land breeze. About two miles further to the northward, we found another opening which led us into a most capacious and noble Harbour. In depth it cannot be less than three miles, and the soundings from the entrance to our anchoring ground were from eight to fifteen fathoms. We *brought to* in this place for the rest of the day.

By an indifferent observation at noon, our Latitude was 11° 57' 52."

The shores of this Harbour are mostly lined with mangroves. The land about it is much lower than the country about Port Cornwallis, and might probably be much sooner brought to a state of cultivation. At the mouth of this Bay is a very pleasant looking Island, and the channel on each side seems to be perfectly navigable. We entered on the south side and had from ten to fifteen fathoms quite through. We saw a canoe with four or five of the natives cross over from the small Island to the main, and in the afternoon we found upon the former, a hut, which appeared to have been recently deserted. It is probable that the appearance of the vessels had alarmed them, and induced them to abandon their habitation.

♂ 23rd Mar. This morning we made a survey of the Harbour, by taking
p 2

bearings and angles in different directions and calculating distances by sound from the report of guns and muskets. We rowed out in our small boat to a rocky point at the Northern entrance of the Harbour. Here we stayed about an hour to make our observations and take views. We saw three canoes with about twenty of the natives coming round a point to the Northward, probably with an intention to attack us. This induced us to abandon the rock, and we got into our boat. We fired two muskets in the air for a signal of sound. This appeared to alarm the natives, for they began rowing back immediately. The rock we were upon is remarkably steep, its sides rising perpendicularly out of the water. We had soundings of five fathoms quite close to it. We saw, while upon it, great numbers of sharks swimming about. They appeared to be very ravenous.

Latitude $11^{\circ} 58' 46''$.

- g 24th Mar. This morning we left the Harbour, which Captain K— called Port Meadows. We sailed out at the southern entrance, which is about five hundred yards across. We stood a little to the Northward till we had opened a pretty deep Bay. We thought this might be the passage which, we had been informed at Port Cornwallis, led through the Island into a spacious Harbour, and had two outlets on the western side of the *Great Andaman*. In the afternoon, we rowed up the Bay, at the bottom of which we found the passage in question. It is about six hundred yards across in most places and has twelve and fifteen fathoms water. We went up about three miles in a N. West direction through this *Strait*, and were convinced from its appearance, that vessels of a moderate size might navigate it. The only difficulty which occurs is a bar of two and a half fathoms, at the entrance of the Bay which leads to it.

- u 25th Mar. Weighed anchor at 8 o'clock and stood to the Northward. About 2 P. M. we anchored close to a little rocky Island about a mile from the main. We landed upon it in the afternoon and found great numbers of snakes between the crevices of the rocks. We killed one about six feet in length.
- q 26th Mar This morning we stood over to the Islands called Archipelago, about seven or eight miles to the eastward of the main Island. We had been informed that there was a tolerable harbour among them. About 11 o'clock we got into this

supposed harbour, but found that it was totally unfit for the purpose. We saw here two or three canoes with some Caffres. They were busy in fishing and did not appear to take much notice of us. However, in passing a rocky point, we saw distinctly with our glasses some of the natives hid among the stones with their bows and arrows. One of them had advanced into the water, and was calling out to us as loud as he could. Their intention was probably to allure some of us on shore, and to attack us suddenly if we landed. In the afternoon we returned and anchored near Snake Island.

- h 27th Mar. We moved about one mile this morning and anchored at the mouth of a creek, which appeared to lead into a harbour. In the afternoon we rowed up in our boats about four miles, till we found this Inlet open again to the sea. It has pretty deep water all the way through, and branches off in several places. We saw several of the natives' huts and near to one, there were some cocoanut-trees.
- © 28th Mar. We stood to the northward with the land breeze. About noon we were a little to the northwestward of Passage Island. We stood in shore and anchored in a deep and spacious Bay, which branches out in different directions and communicates to the southward with the creek we were in the day before yesterday. At night we caught plenty of fish with hooks and lines, and among them some very large rock cods.
- h 29th Mar. This day was spent in cruizing about the Bay. We found many reefs and shoals in it and were once very near aground. We saw two huts and some of the natives sitting under them. Also a canoe with three men who appeared to be very much alarmed at the sight of the vessels and were paddling away as hard as they could.
- ♂ 30th Mar. We moved this morning to the northern part of the Bay. A party was sent ashore to look for a watering-place. They found at last a small well which had been dug by the natives, but the water was a little brackish, which prevented our filling the casks. We saw some huts and one of their canoes. In the former were found several skulls and jaw bones of wild hogs, some of which were painted in a chequered manner with red. They were strung together with slips of rattan and suspended to the roof. In the canoe were two small paddles shaped like spades. While the

party was on shore looking for water the natives were observed from on board the "Ranger" watching their motions and probably meditating an attack, but our party was sufficiently strong to encounter a great number of them, having six men armed with muskets and bayonets. There were several pathways leading through the woods.

♀ 31st Mar. About 11 o'clock we stood out of the Bay with the sea breeze. We sailed up the coast about eight miles, and anchored in the afternoon within half a mile of the shore. Captain K—— and Mr. M—— took an airing in the boat and saw a great number of the natives. They shot about a dozen arrows at the boat, but not one flew near enough to do any mischief. A couple of muskets fired over their heads induced them to retreat into the woods. The arrows were picked up from the surface of the water and brought on board. We found some of them headed with fish bones, which was what we had never observed before.

♂ 1st April.... We stood to the northward along the coast. The land we passed this day was very high. A ridge of mountains covered with wood runs along the coast. In the evening we anchored at the mouth of a great Bay. We caught with hooks and lines a number of rock cods, and some of an enormous size.

♀ 2nd April. This morning we stood into the great Bay. It appears to run a great way in land.

Latitude $12^{\circ} 52' 41''$. We saw this morning the most enormous shark that any of us had ever seen or heard of. He swam about the vessel during about ten minutes, and when he came along side, by comparing him with our vessels, we judged him to be near twenty-five feet in length and above four feet in breadth over the shoulders. He was spotted like a leopard, and was attended by a number of pilot and sucking fish. We anchored in the afternoon at the bottom of the Bay. It runs inland about eight miles from the line of the coast and is divided into three branches. There are in it five or six small Islands, upon one of these we got oysters.

♂ 3rd April. We cruized about the Bay to examine it. A boat belonging to the "Ranger" being left upon the spot where the vessel had anchored, was attacked by some of the natives in their canoes. They came suddenly out from behind the mangroves

and discharged a great number of arrows, some of which went through the boat's sail. There were only two lascars in the boat, and they had no fire-arms; so that they were obliged to retreat as fast as they could with the loss of their grapnel and twenty fathoms of rope. One of the arrows which dropped in the boat measured five feet six inches.

- ☉ 4th April. We sailed up with the sea breeze towards the northern extremity of the Bay and found another outlet to the sea. We anchored about noon.

Latitude $12^{\circ} 58' 00''$. A canoe with two men came off this morning from the shore. They shewed at first an inclination to come on board. We bore down to get near them, but when we had got within two hundred yards of them they would approach no nearer, but kept talking to us in a loud and angry tone. We heard the voices of some people on shore, among whom we could distinguish some women, who were calling out to them as if apprehensive of their getting into danger and wishing them to return. We threw overboard two empty bottles which they picked up from the water when they had drifted astern to some distance. Finding that we could not induce them to come nearer, Mr. W—— with three or four men went after them in our boat to endeavour to bring them to a conference, but in vain. They paddled off as hard as they could, nor could our boats get near them. While our boat was in pursuit of them, we observed their motions from the vessel with our telescopes. They at first appeared to be alarmed, but soon shewed signs of resolution and coolness. The foremost man put down his paddle and very deliberately baled out the water. He then took up his bow and arrows from the bottom of the canoe and laid them down by him. The other now and then stopped paddling to look behind him. He made signs to our people to come on, and at last clapped his hand to his posteriors, probably as a mark of contempt. In the afternoon Captain K—— and Mr. W—— went out in the boat, they saw one of the natives upon the beach, who called out and made signs to them to come near; but it was only with an intention of leading them into a snare, for the boat had no sooner approached within fifty paces of him than Captain K—— perceived a number of men laying in ambush under the

mangroves. When they found themselves detected they rushed out and sent a shower of arrows at the boat, some of which flew over it. Two muskets were fired over their heads, which made them retreat, and our people picked up about 30 of their arrows from the water. They were all headed with fish bones, and some were six feet long.

- ♂ 5th April. We got our water filled up from the "Ranger" and prepared to leave the Andamans for Bengal. Sailed out of the Bay at the southern outlet.

Northerly wind. We stood off and on the shore.

- ♂ 6th April. In the afternoon we were close to the Saddle Mountain; it rises immediately from the shore to a considerable height: not less by our most moderate estimation than 2500 feet from the level of the sea. It is almost entirely covered with wood, except in two or three places, where there appear to be some rocky cliffs. Captain Blair went ashore. He saw some of the natives, who fled at his approach. He found a rill of fine fresh water, which came from the mountain. Standing to the northward.

- ♂ 7th April. About four miles to the northward of the Saddle Mountain we found another inlet which led into a Bay branching out in several directions. Mr. Blair with the "Ranger" and "Viper" went into it to survey and examine it. We took leave of them and pursued our course for Bengal.

- ♀ 9th April. Latitude $13^{\circ} 42' 03''$. The north extremity of all the Islands bore at noon E. 20 S distant about five miles.

Latitude of north end, as derived from the above, $13^{\circ} 40' 22''$. A breeze sprung up from the northward and we hauled close to the wind, steering W. by N. At sunset the Saddle bore S. 44 W. and was the only part of the land which remained visible.

LIEUTENANT COLEBROOKE'S ACCOUNT OF THE ANDAMAN ISLANDS. PRINTED IN VOLUME IV. OF THE ASIATIC RESEARCHES, 1795.

THE Andaman islands are situated on the eastern side of the bay of Bengal,* extending from north latitude $10^{\circ}42'$ to $13^{\circ}40'$. Their longitude is from $92^{\circ}6'$ to $92^{\circ}59'$ east of Greenwich. The Great Andaman, or that portion of the land, hitherto so called, is about one hundred and forty British miles in length, but not more than twenty in the broadest part. Its coasts are indented by several deep bays, affording excellent harbours, and it is intersected by many vast inlets and creeks, one of which has been found to run quite through, and is navigable for small vessels. The Little Andaman is the most southerly of the two, and lies within thirty leagues of the island Carnicobar. Its length is twenty-eight miles, by seventeen in breadth, being more compact, but it does not afford any harbour, although tolerable anchorage is found near its shores. The former is surrounded by a great number of smaller islands.

The shores of the main island, and indeed of all the rest, are in some parts rocky, and in a few places are lined with a smooth and sandy beach, where boats may easily land. The interior shores of the bays and creeks, are almost invariably lined with mangroves, prickly fern, and a species of wild rattan, while the inland parts are covered with a variety of tall trees, darkened by the intermixture of creepers, parasite plants, and underwood; which form altogether, a vast and almost impervious forest, spreading over the whole country. The smaller islands are equally covered with wood; they mostly contain hills of a moderate height, but the main island is distinguished by a mountain of prodigious bulk, called from its shape the Saddle Peak; it is visible in clear weather, at the distance of twenty-five leagues, being nearly two thousand four hundred feet in perpendicular height. There are no rivers of any size upon these islands, but a number of small rills pour down from the mountains,

* It is perhaps a wonder, that islands so extensive, and lying in the track of so many ships, should have been, till of late years, so little known; that while the countries by which they are almost encircled, have been increasing in population and wealth, having been from time immemorial, in a state of tolerable civilization, these islands should have remained in a state of nature, and their inhabitants plunged in the grossest ignorance and barbarity.

The wild appearance of the country, and the untractable and ferocious disposition of the natives, have been the causes, probably, which have deterred navigators from frequenting them, and they have justly dreaded a shipwreck at the Andamans, more than the danger of foundering in the Ocean; for although it is highly probable, that in the course of time, many vessels have been wrecked upon their coasts; an instance does not occur of any of the crews being saved, or of a single person returning to give any account of such a disaster.

affording good water, and exhibiting in their descent over the rocks a variety of little cascades, which are overshadowed by the superincumbent woods.

The soil is various in different parts of these islands;* consisting of black rich mould, white and dark coloured clays, light sandy soil, clay mixed with pebbles of different colours, red and yellow earth; but the black mould is most common. Some white cliffs are met with along the shores, which appear to have been originally clay, with a mixture of sand, hardened by time into the consistence of stone; but might be cut, and would probably answer for building. Near the southern extremity of the great island, where it is mountainous and rocky, some indications of minerals have appeared, particularly of tin. There is also a kind of free stone, containing a yellow shining spar, resembling gold dust. Some of the hills bordering the coasts, exhibit blue schistose strata at their bases, with the Breccia or pudding stone; and some specimens of red ochre have been found, not unlike cinnabar.

The extensive forests, with which these islands are overrun, produce a variety of trees fit for building and many other purposes. The most common are the poon, dammer, and oil trees; red wood, ebony, cotton tree, and buddaum or almond tree; soondry, chingry and bindy. Alexandrian laurel, poplar, and a tree resembling the satin wood; bamboos, and plaas, with which the natives make their bows. Cutch, affording the extract called Terra Japonica. The Melori, or Nicobar bread-fruit; aloes, ground rattans, and a variety of shrubs. A few fruit trees have been found in a wild state, but it is remarkable, that cocoanuts, so common in other tropical countries, are here almost unknown. Many of the trees afford timbers and planks, fit for the construction of ships, and others might answer for masts. A tree grows here to an enormous size, one having been found to measure thirty feet in circumference, producing a very rich dye, that might be of use in manufactures.

The only quadrupeds yet discovered in these islands, are wild hogs, monkeys and rats. Guanas, and various reptiles abound; among the latter is the green snake, very venomous; centipedes of ten inches long, and scorpions.

A variety of birds are seen in the woods; the most common are pigeons, crows, parroquets, kingfishers, curlews, fish-hawks and owls. A species of humming bird, whose notes are not unlike the cuckoo, is frequently heard in the night.

The principal caverns and recesses, composing part of the coast, give shelter to the birds that build the edible nests; an article of commerce in

* I am indebted to Major Kyd and Captain Archibald Blair, for many of the subsequent remarks. The latter was employed by Government in surveying these islands, and has the credit of having furnished the first complete and correct Chart of the Andamans.

the China market, where they are sold at a very high price. It has been thought, that these nests are formed from a glutinous matter, exuding from the sides of the caverns, where these birds, during nidification, resort. It is not known whether they emigrate, but the period of their incubation takes place in December, and continues till May. Not more than two white spotless eggs, have been found in their nests, but they have been further supposed to breed monthly.

The harbours and inlets from the sea, are plentifully stocked with a variety of fish; such as mullets, soles, pomfret, rock fish, skate, gurnards, sardinas, roeballs, sable, shad, alouse, cockup, grobers, seer fish, old wives, yellow tails, snappers, devil fish, cat fish, prawns, shrimps, cray fish, and many others. A species resembling the whale, and sharks of an enormous size are met with. A variety of shell fish are found on the reefs, and in some places oysters of an excellent quality. Of the many madrapores, corallines, zoophites, and shells, none have yet been discovered but such as are found elsewhere.

The Andaman islands are inhabited by a race of men, the least civilized perhaps in the world; being nearer to a state of nature than any people we read of. Their colour is of the darkest hue, their stature in general small, and their aspect uncouth. Their limbs are ill-formed and slender, their bellies prominent, and like the Africans they have woolly heads,* thick lips, and

* In this respect, they differ from all the various tribes, inhabiting the continent of Asia, or its islands. A story is somewhere told, of a ship full of African slaves, of both sexes, having been cast away at the Andamans; and that having put to death their masters and the ship's crew, they spread themselves over, and peopled the country. This story does not appear to have been well authenticated, nor have I ever met with the particular author who relates it. They have been asserted by some to be cannibals, and by others (vide Captain Hamilton's Voyage, and all the Geographical Dictionaries) to be a harmless and inoffensive people, living chiefly on rice and vegetables. That they are cannibals has never been fully proved, although from their cruel and sanguinary disposition, great voracity, and cunning modes of lying in ambush, there is reason to suspect that in attacking strangers, they are frequently impelled by hunger; as they invariably put to death the unfortunate victims who fall into their hands. No positive instance, however, has been known, of their eating the flesh of their enemies, although the bodies of some whom they have killed have been found mangled and torn. It would be difficult to account for their unremitting hostility to strangers, without ascribing this as the cause; unless the story of their origin, as above mentioned, should be true; in which case they might probably retain a tradition of having once been, in a state of slavery. This in some degree would account for the rancour and enmity they shew, and they would naturally wage perpetual war with those who, they might suspect, were come to invade their country, or enslave them again.

flat noses. They go quite naked, the women wearing only at times, a kind of tassel, or fringe round the middle; which is intended merely for ornament, as they do not betray any signs of bashfulness, when seen without it. The men are cunning, crafty, and revengeful; and frequently express their aversion to strangers, in a loud and threatening tone of voice, exhibiting various signs of defiance, and expressing their contempt by the most indecent gestures. At other times they appear quiet and docile, with the most insidious intent. They will affect to enter into a friendly conference, when, after receiving with a show of humility whatever articles may be presented to them, they set up a shout and discharge their arrows at the donors. On the appearance of a vessel or boat, they frequently lie in ambush among the trees, and send one of their gang, who is generally the oldest among them, to the water's edge, to endeavour by friendly signs to allure the strangers on shore. Should the crew venture to land without arms, they instantly rush out from their lurking places, and attack them. In these skirmishes they display much resolution, and will sometimes plunge into the water to seize the boat; and they have been known even to discharge their arrows while in the act of swimming. Their mode of life is degrading to human nature, and, like the brutes, their whole time is spent in search of food. They have as yet made no attempts to cultivate their lands, but live entirely upon what they can pick up, or kill. In the morning they rub their skins with mud, or wallow in it like buffaloes, to prevent the annoyance of insects, and daub their woolly heads with red ochre, or cinnabar. Thus attired, they walk forth to their different occupations. The women bear the greatest part of the drudgery in collecting food, repaire to the reefs at the recess of the tide, to pick up shell fish; while the men are hunting in the woods, or wading in the water to shoot fish with their bows and arrows. They are very dexterous at this extraordinary mode of fishing, which they practise also at night; by the light of a torch. In their excursions through the woods, a wild hog, sometimes, rewards their toil, and affords them a more ample repast. They broil their meat, or

It would appear that these islands were known to the ancients (see Major Rennell's Memoir, introduction Page xxvix). They are mentioned, I believe, by Marco Polo; and in the ancient accounts of India and China, by two Mahomedan travellers, who went to those parts in the ninth century, translated from the Arabic by Eusebius Renaudot, may be seen the following curious account: "Beyond these two islands (Nerabus, probably Nicobars) lies the sea of Andaman; the people on this Coast eat human flesh quite raw; their complexion is black, their hair frizzled; their countenance and eyes frightful; their feet are very large and almost a cubit in length, and they go quite naked. They have no embarkations; if they had, they would devour all the passengers they could lay hands on, &c."

fish, over a kind of a grid, made of bamboos; but use no salt, or any other seasoning.

The Andamaners, display at times, much colloquial vivacity, and are fond of singing and dancing; in which amusements, the women equally participate. Their language is rather smooth than guttural, and their melodies are in the nature of recitative and chorus, not unpleasing. In dancing, they may be said to have improved on the strange republican dance, asserted by Voltaire to have been exhibited in England, "*Où dansant à la ronde, chacun donne des coups de pieds à son voisin, et en recoit autant.*" The Andamaners likewise dance in a ring, each alternately kicking and slapping his own breech, *ad libitum*. Their salutation is performed by lifting up a leg, and smacking with their hand the lower part of the thigh.

Their dwellings are the most wretched hovels imaginable. An Andaman hut may be considered the rudest and most imperfect attempt of the human race to procure shelter from the weather, and answers to the idea given by Vitruvius, of the buildings erected by the earliest inhabitants of the earth. Three or four sticks are planted in the ground, and fastened together at the top, in the form of a cone, over which, a kind of thatch is formed with the branches and leaves of trees. An opening is left on one side, just large enough to creep into, and the ground beneath is strewn with dried leaves, upon which they lie. In these huts, are frequently found the skulls of wild hogs, suspended to the roofs.

Their canoes, are hollowed out of the trunks of trees, by means of fire, and instruments of stone, having no iron in use amongst them, except such utensils as they have procured from the Europeans and sailors, who have lately visited these islands; or from the wrecks of vessels formerly stranded on their coasts. They use also rafts, made of bamboos, to transport themselves across their harbours, or from one island to another. Their arms have already been mentioned in part, I need only add that their bows are remarkably long, and of an uncommon form; their arrows are headed with fish bones, or the tusks of wild hogs; sometimes merely with a sharp bit of wood, hardened in the fire, but these are sufficiently destructive. They use also a kind of shield, and one or two other weapons have been seen amongst them. Of their implements for fishing, and other purposes, little can be said. Hand-nets of different sizes are used in catching the small fry, and a kind of wicker basket which they carry on their backs, serves to deposit whatever articles of food they can pick up. A few specimens of pottery ware have been seen in these islands.

The climate of the Andaman islands, is rather milder than in Bengal. The prevailing winds are the south west and north east monsoons, the former commencing in May, and bringing in the rains; which continue to fall with

equal if not greater violence till November. At this time the north east winds begin to blow, accompanied likewise by showers, but giving place to fair and pleasant weather during the rest of the year. These winds vary but little, and are interrupted only at times, by the land and sea breezes. The tides are regular, the floods setting in from the west, and rising eight feet at the springs, with little variation in different parts. On the north east coast it is high water, at the full and change of the moon at $8^{\circ} 33'$. The variation of the needle is $2^{\circ} 30'$ easterly.

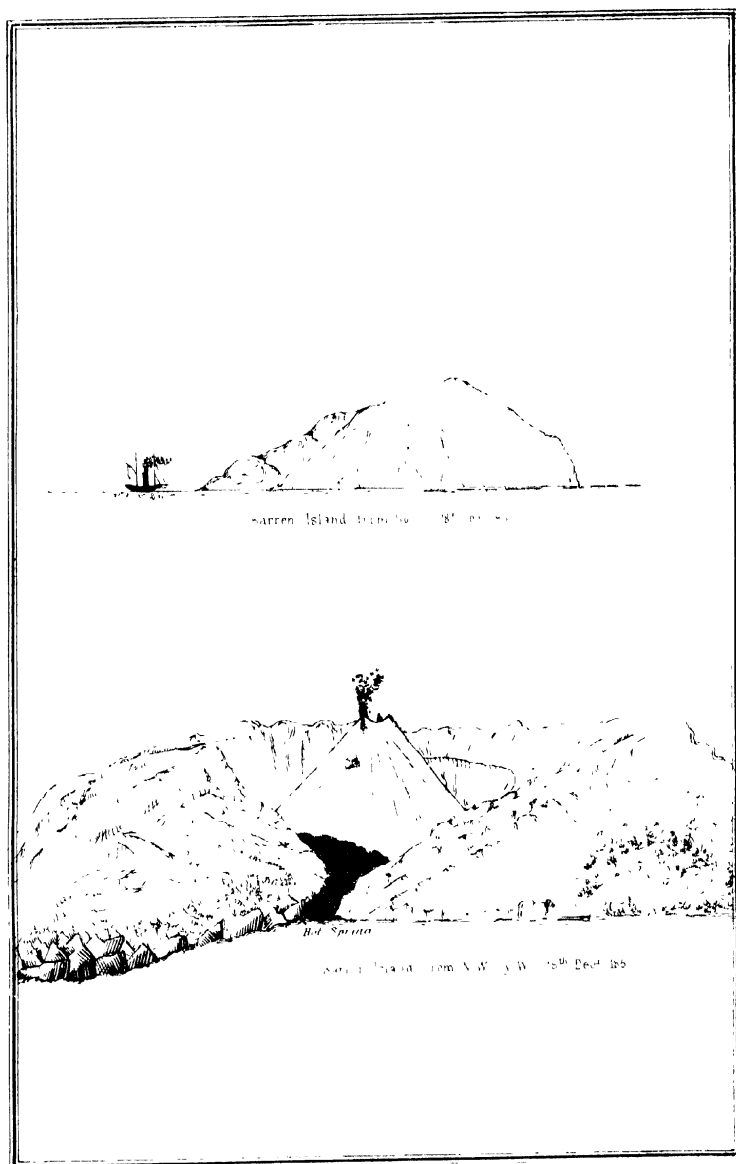
Specimen of the Andaman Language.

Andaman island, or native country,	...	...	...	...	Mincopie,
Ant,	...	...	...	...	Ahoda,
Ant, White, in it's winged state,	...	...	...	...	Doughay,
Arrow,	...	...	...	...	Buttohie,
Arm,	...	...	...	...	Pilie,
Bat,	...	...	...	...	Vilvila,
Bamboo,	...	...	...	...	Otallie,
Bangle,	...	...	...	...	Alai,
Basket,	...	...	...	...	Tetegay,
Black,	...	...	...	...	Cheegheooga,
Blood,	...	...	...	...	Cochengohee,
Bead,	...	...	...	...	Tahee,
To beat,	...	...	...	...	Ingo taheya,
Belly,	...	...	...	...	Napoy,
To bind,	...	...	...	...	Totoba oto goley toha,
Bird,	...	...	...	...	Lohay,
To bite,	...	...	...	...	Moepaka,
Boat,	...	...	...	...	Loccay,
Boar,	...	...	...	...	Stohee,
Bow,	...	...	...	...	Tongie,
Bow-string,	...	...	...	...	Geetahie,
Breast,	...	...	...	...	Cah,
Bone,	...	...	...	...	Geetongay,
Charcoal,	...	...	...	...	Wehee,
Chin,	...	...	...	...	Pitang,
Cold,	...	...	...	...	Choma,
Coco-nut,	...	...	...	...	Bollate,
Cotton cloth,	...	...	...	...	Pangapee,
To cough,	...	...	...	...	Ingotahey,
Crow,	...	...	...	...	Nohay,
To cut,	...	...	...	...	Hojeeha,

Door,	...	...	...	Tang,
To drink,	...	...	...	Meengohee.
Earth,	...	...	...	Totongnangee,
Ear,	...	...	...	Quaka,
To eat,	...	...	...	Ingelholiah,
Elbow,	...	...	...	Mohalajabay,
Eye,	...	...	...	Jabay.
Finger,	...	...	...	Momay,
Fire,	...	...	...	Mona,
Fish,	...	...	...	Nabohee,
Fish-hook,	...	...	...	Atabca,
Flesh,	...	...	...	Woohee,
Foot,	...	...	...	Gooke,
Friend,	...	...	...	Padoo,
Frog,	...	...	...	Etolay.
Goat,	...	...	...	Kokee,
To go,	...	...	...	Ooffeema,
Grass,	...	...	...	Tohobee.
Hair,	...	...	...	Otte,
Hand,	...	...	...	Gonie or Monie,
Head,	...	...	...	Tabay,
Honey,	...	...	...	Lorkay,
Hot,	...	...	...	Hooloo,
House,	...	...	...	Beday.
Jack Fruit,	...	...	...	Abay,
Jackall,	...	...	...	Omay,
Iron, or any metal,	...	...	...	Dohie,
Kiss,	...	...	...	Itolie,
Knee,	...	...	...	Ingolay,
To laugh,	...	...	...	Onkeomai,
Leaf of a tree,	...	...	...	Tongolie,
Leg,	...	...	...	Chigie,
Man,	...	...	...	Camolan,
Moon,	...	...	...	Tabie,
Musequeto,	...	...	...	Hohenangee,
Mouth,	...	...	...	Morna.
Nail,	...	...	...	Mobejedanga,
Neck,	...	...	...	Tohie,
Net,	...	...	...	Botolee,
Nose,	...	...	...	Mellee,
Paddle or oar,	...	...	...	Mecal,

Pain,	...	...	...	...	Alooda,
Palm,	...	...	...	...	Dolai,
Paper,	...	...	...	...	Pangpoy,
Pike,	...	...	...	...	Woobalay,
To pinch,	...	...	...	...	Ingee genecha,
Plantain tree,	...	...	...	...	Cholellee,
Pot,	...	...	...	...	Bootchoochie,
To pull,	...	...	...	...	Totobati Gehooa.
Rain,	...	...	...	...	Oye,
Red,	...	...	...	...	Gheallop,
Road,	...	...	...	...	Echolle,
To run,	...	...	...	...	Gohabela.
To scratch,	...	...	...	...	Inkahey aha,
Seed,	...	...	...	...	Keetongay,
Sheep,*	...	...	...	...	Neena,
Smoke,	...	...	...	...	Boleenee,
To sing,	...	...	...	...	Gokobay,
To sit down,	...	...	...	...	Gongtohee,
Shadow,	...	...	...	...	Tangtohee,
To sleep,	...	...	...	...	Comoha,
To sneeze,	...	...	...	...	Oh-cheka,
To spit,	...	...	...	...	Inkahoangy,
To swim,	...	...	...	...	Quaah,
To swallow,	...	...	...	...	Beebay,
Sky,	...	...	...	...	Madamo,
Star,	...	...	...	...	Chelobay,
Stone,	...	...	...	...	Woolay,
Sun,	...	...	...	...	Ahay.
To take up,	...	...	...	...	Catoha,
Thigh,	...	...	...	...	Poye,
Teeth,	...	...	...	...	Mahoy,
Tongue,	...	...	...	...	Talie,
Thunder and lightning,	...	...	...	...	Mausay-Macco.
To wash,	...	...	...	...	Inga doha,
Wasp,	...	...	...	...	Bohomakee,
To walk,	...	...	...	...	Boony-jaoa,
Water,	...	...	...	...	Migway,
To weep,	...	...	...	...	Oana-wannah,
Wind,	...	...	...	...	Tomjamay,
Wood,	...	...	...	...	Tanghee,

* It may appear surprising that they should have names for animals that are not found in their islands. This circumstance may tend to confirm the story of their origin.



APPENDIX No. 5.

BARREN ISLAND.

Having been for some days exposed to the noxious exhalations from the mangrove swamps fringing the eastern shores of the Great Andaman, it was determined by the Committee to visit Barren Island, a Volcanoe said to be still active, and in doing so, we were able to examine a place little known, and at the same time ensure, as far as possible, the health of our crew.

Barren Island, so called from the scanty vegetation which shews itself on its fire-formed rocks, is 50 miles East of the Great Andaman, lying in $12^{\circ} 15'$ North Latitude, and 93° East Longitude.

It forms a link in the chain of volcanic action which, commencing in the Island of Java, extends North-west and North in a curved line, shewing itself in the Bay of Bengal in Barren Island,—in the Nacondam Rock, an extinct volcanic summit 45 miles directly East from Port Cornwallis, and in the mud volcanoes on the coast of Burmah.

Barren Island was visited by Lieut. Blair of the Indian navy in the year 1789—it was then in a state of violent eruption, large volumes of smoke and vapour issuing from its summit, and huge masses of rock being ejected to a considerable distance from the crater.

Another account of the Island appeared in the Asiatic Researches, upwards of 40 years later. The writer when passing in his vessel, was induced to land. The Volcanoe although smoking, was at that time quiescent.

I am not aware that the Island has been visited by any one else, but as Sir C. Lyell in the description and drawing given in his Principles of Geology, has apparently been misled as to the structure and elevation of the Island, it is probable some such account exists, for neither of the descriptions above mentioned makes any allusion to the existence of water between the external crater and the central cone of elevation.

We approached the Island from the South at daybreak on the 18th December, 1857, and, at the distance of eight or nine miles, it exhibited the outline

shown in the upper drawing No. 1, apparently inaccessible, until we steamed round to its North-west shore, where we found a break or ravine, along which we could see up to a cone which rose in the centre of a circular crater.

The Island is nearly circular, has a diameter of 2970 yards, and is formed of high ridges averaging 970 feet, which slope at an angle of 45° towards the sea, and inwards at a larger angle to the base of a central cone 975 feet in height, and having a diameter of 2100 feet at its base. The sketch taken from on board the steamer when opposite the ravine, and the Bird's-eye view, give a tolerable idea of the appearance of the Island.

Having approached in a boat to examine the break in the outer ridge which gave the only promise of a spot on which a landing could be effected, we found that an abrupt wall of lava about 20 feet in height filled the greater part of it, but that on its eastern extremity there was a sandy beach a few yards in extent.

Having pushed the boat in on this beach, the men jumped into the water in order to fasten her to a rock, but more quickly jumped on board again, the water being quite hot. The tide was then about half flood, and amongst the stones at the water's edge we discovered a spring bubbling up, the temperature of which was too high to be borne by the hand, the mercury in the only Thermometer in our possession rising immediately to 140° —its limit.

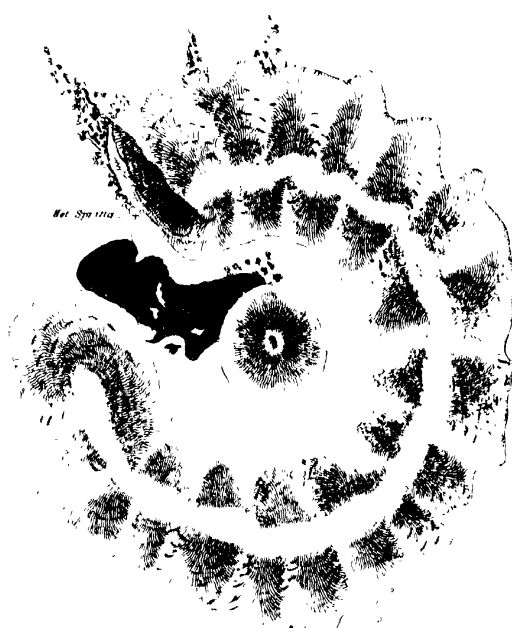
I have no doubt that had we been able to try the amount of heat before the spring was cooled by the rising tide, it would have been found at boiling point.

From the landing-place we walked towards the base of the cone over a mass of lava, which extends the whole distance, and fills the greater part of the ravine.

At its surface it is broken up into irregular shaped blocks of loose texture, containing a large amount of felspar, crystals, the lower strata of closer texture, probably from cooling more slowly.

The eastern side of the ravine exhibited alternate layers of lava, trap and scoria; the slope inclined towards the sea. This is represented on a small scale in the drawing which shows a section of the Island.

The cone which rises at an angle of 40° is covered with fine ashes, the inner slopes of the external crater are also covered with the same fine ash to their summits, but on the northern and eastern sides, the slopes are almost as smooth and regular as the cone itself, while the South-west aspect is so much less covered that the ridges of which it is formed are visible running inwards towards the base of the cone. The evident cause of this difference is that the South-west monsoon blows with great force during seven or eight months of the year, the North-east monsoon only lasting four months.



PLAN AND SECTION
of
BARREN ISLAND

EAST OF THE GREAT ANDAMAN.
from Drawings by
D. G. R. Playfair



The upper part of the cone is truncated and hollowed, of an oval shape, the length from N. W. to S. E.—the hollow being filled with rough masses of lava, and on the Northern edge are numerous fissures filled with loose ashes, through which the smoke issues. At this spot the scoria and masses of lava are encrusted with sulphur.

On the edge of the hollow towards the beach there is a huge upright mass of rock which, as seen from below against the sky, looks like a pillar.

Some smoke was seen occasionally to issue from the slope of the cone a little way below this rock.

On the slope of the cone 200 feet from the summit towards the N. W. was a projection formed by a large mass of rock from which at some period, I believe, eruptions have taken place.

From this point to the summit, the heat was felt through the soles of the shoes in ascending.

The whole bed of the Island between the cone and external crater, is at least 50 feet above high-water mark. I could not, after very careful examination, satisfy myself that there had been any recent upheaval of the island, none of the rocks exhibiting signs of having been water-worn.

There is a great similarity, although on a smaller scale, to the island of Palma which, however, has long been extinct. The island of St. Paul's has also a similar formation as regards the external crater, but its fires having become extinct and no cone of elevation raised, the centre exhibits a basin 150 feet in depth.

The origin of the ravine or break in each of these islands may, I believe, be learned from the formation of the central cone in Barren Island. The only points of exit for the smoke are at the summit; and on the slope below the pillar-like rock in that direction, the crust of the cone is evidently thinner than elsewhere.

Were an explosion to take place, its effect on the greatest part of the cone where there is solidity and resistance would be to throw or bend the rocks outwards, while in the direction where the crust was weak, the explosion would blow out the side altogether, leaving a gully or ravine.

G. R. PLAYFAIR, M. D.

BARREN ISLAND.

Barren Island is a Volcanic Island, situated in Lat $12^{\circ} 17' N.$ and in Long. $93^{\circ} 54' E.$ Its smallest distance from the Andaman Archipelago is in a straight line only 36 miles East. The distance from the nearest point of the main land, near Tavoy, is about 270 miles W. S. W. It lies not far out of the straight course between Port Blair and Amherst, about 63 miles from the former, and 330 from the latter place. The *Semiramis* approached the Island on the morning of the 19th March, 1858, coming from the N. E., and steamed round it by S., keeping close to the shore, until the ship was opposite the entrance of the crater bearing about W. and by N. from the centre of the Island where she hove to, and we landed.

It is stated in former accounts, that all round the Island the lead finds no bottom at 150 fathoms, only $\frac{1}{2}$ mile distant from the shore. Captain Campbell found, however, ground at that distance on one side of the Island, its centre bearing N. E. at a depth varying from $4\frac{1}{2}$ to 14 fathoms.

Nearing the Island from the North and passing round to the South East of it, it looks from a distance like an oval-topped hill; but coming closer, the sides of the mountain are discovered to belong to a steep circular elevation, sending out spurs towards the sea and enclosing a central valley. The sides of the enclosing circle being lower in the direction of the spectator, the upper circumference of this valley is seen in the shape of an oval ring, formed by the crest of the surrounding ridge. In the middle of this ring, the upper part of a regular cone is visible, from the apex of which small white vapour-like clouds emanate. It is also distinguished from the surrounding darker masses by its grey colour, and some large white marks on it, like fields of snow. An entrance is not discernible.

The slopes towards the sea are generally covered with shrubby vegetation, presenting, however, some bare patches towards the upper edge. Small trees grow about the base, where large rounded stones are washed by the sea.

Turning now to the S. and S. W. the enclosing wall is higher than the cone and the crest of the opposite ridge, and both therefore disappear from the view. On this side the vegetation down the spurs to the sea may be called rich, and consists of different forest trees of moderate height, interspersed with graceful palms; and where the descent is rocky, the rocks are frequently covered with ferns.

Passing to the westward of the centre of the Island, and continuing the survey towards the northern end, one of the first turns discovers a large gap in the circular wall, extending quite down to the base of the Island, through which the interior of the valley, with the cone in the middle, opens at once into full view.

The sides of this gap or fissure in the circular wall form a regular cut or short transverse valley through it, opening towards the sea into a small bay, and on the other side into the circular valley, to which it is the only way of access. Opposite this entrance, in the centre of the valley, rises the cone of grey ashes, and surrounding its base, the bottom of the valley is filled with black masses of cold lava, which are continued like a congealed stream through the gap, breaking off abruptly when they arrive near the water's edge. At its termination the stream is about 10 or 15 feet high, and its breadth seems less than farther up. It looks like a black perpendicular wall, drawn across the entrance and facing the sea.

This lava consists of a black basalt mass (matrix) throughout which are disseminated innumerable semi-transparent little crystals of a variety of common felspar (orthoclase), and also many bright green granules of olivine. The lower part of its thickness is homogeneous, with a smooth fracture, but from the upper surface to a depth of several feet it is cleft in all directions, whereby the upper part is divided into rough blocks, possessing a spongy texture as well as countless sharp edges and corners.

The older lava, composing the rocks on the side of the valley and also the strata of the surrounding ridge, is slightly different from this. The colour of its principal mass is a reddish grey, felspar and olivine crystals are embedded in it in the same proportions as before, and in addition small pieces of black angite of the granular kind, with conchoidal fracture. From underneath the black lava, where it terminates near the sea, issues a broad but thin sheet of hot water, mixing with the sea water between the pebbles of the beach. The Thermometer I had with me was not graduated high enough to measure its temperature, its highest mark being 104° F. (40° C.) The water when escaping from the rock must have been nearly at the boiling point, judging from the heat felt when the hands were dipped into it, or when the hot stones were touched. When bathing, we found the sea-water warm for many yards from the entrance of the hot spring and to a depth of more than 8 feet. It is not impossible that a jet of hot steam or water may emerge from the rocks below the level of the sea. The hot water tasted quite fresh, and not saline as might have been expected, showing that it could not have been long in contact with the rocks.

We ascended to the base of the cone, passing along the sloping sides of the transverse valley through dry grass and brushwood or over sandy ridges, so long as the solidified stream of lava in the middle left us room to do so. At last we had to ascend the rugged surface of the black lava itself, and cross the circular valley, which has about the same breadth as the transverse valley (not quite one-eighth of a mile), until we arrived at the base, about half a mile from the sea. The cone rises from the lava accumulated in the circular valley,

and its base is about 50 feet higher than the level of the sea, at a rough estimate. It is quite round and smooth, and the inclination of its sides is 40 degrees. No vegetation of any kind was visible along its surface. We turned to the left and went up from the North side where the appearance of a ravine, some way up, only two or three feet deep and very narrow with some tufts of grass growing along it, promised an easier ascent for a part of the way, and where a rocky shoulder at about two-thirds of the height would offer a place to rest. Our ascent commenced at about 2½ p. m., and was certainly the most fatiguing expedition many of us remember ever to have undertaken. The sky was almost cloudless, and the heat consequently was great. The lower third and more of the slope consisted of a powder of ashes, into which we sunk ankle-deep, and we often fell a step back for two gained. A little higher, stones loosening when the foot stepped on them and rolling down in long lumps, were dangerous to any one following.

Arrived at the rocks mentioned, their nature and the manner in which the side of the cone bulged out in their neighbourhood, showed that they marked the point from whence an effusion of lava of the same kind as we had seen below, had taken place from the side of the cone, not reaching the mouth of the tube at the apex. The last third of the way from the rocks upwards offered a firmer footing, the ashes being cemented by sulphate of lime (gypsum) which, where it was present, formed the white patches we had already observed from a great distance when approaching the Island. The ground now became very hot, not, however, intolerably so, until about 30 feet from the apex a few rocks again offered a convenient seat, not affected by the heat of the ground. There the Aneroid Barometer and the temperature of the air were observed in the shade of an umbrella.

About half way between these rocks and the highest point, cracks and fissures commenced to intersect the ground, widening higher up to the breadth of several inches, where clouds of hot watery vapour issued from them. They were filled with sulphur, often accompanied with beautifully crystallised white needles of gypsum, and a sulphurous smell also accompanied the vapour (sulphurous acid). This smell was, however, not very strong and did not prevent us from penetrating the clouds, when we discovered that, what had appeared from below as the summit was in fact the edge of a small crater, about 90 or 100 feet wide, and 50 or 60 deep. At that depth it had a solid floor of decomposed lava or tufa and volcanic sand. Its walls were made up of rocks, in appearance like those of the older lava, and they were highest on the north and south sides. Towards the west the crater opened with a similar cleft, to that which had permitted us to enter the Island. The vapours rose principally from the northern and southern quarters of the edge, where the fissures were largest and longest, running both parallel and across the edge. The rocks where the

sulphurous vapours issued from between them, were covered with reddish and white crusts, indicating the beginning of decomposition of their substance. From the top, the horizon and more or less of the sea were visible in all directions, with the exception of the quarter between South and West. The inner slope of the circular elevations enclosing the valley, had no spurs, but was like a plain wall, falling off with a steep descent all round towards the centre. It had a uniform brownish colour, appertaining either to the surface of larger masses of the rock itself, or being derived from the dry grass and smaller shrubs covering the slope. There were no trees or brushwood visible to correspond to the richer vegetation on the external circumference. Horizontal parallel lines, traceable throughout the circle and rising somewhat like the borders of receding steps, indicated the thickness and strike of the different sheets of lava and tufa which, super-imposed upon one another, formed the substance of the circular elevation. A very good transverse section of it had already attracted my attention, where the left side of the transverse valley debouches into the sea. Several strata of tufaceous formation, alternating with older rock like lava, could be seen there rising from the rocky beach. One of the most remarkable amongst these was a stratum of rounded stones, like large pebbles, cemented by tufa, exactly like those of the present beach, but at a considerable elevation (about 20 feet) above the high water mark, showing that the sub-marine base of the Island must have been raised since those pebbles had been washed by the sea. All these strata dipped outwards from the centre of the Island, parallel with the external slope of the encircling wall. It is interesting to observe that this slope continues under the sea level on three sides of the Island at least, at the same inclination as above water, which averages about 35° . This is shown by the soundings, which exceed 150 fathoms at a distance of a quarter of a mile from the shore.

Judging from what we saw, as I have here attempted to describe it, I should conclude that the circular valley and its walls constitute the crater of a huge volcanic cone of sub-marine basis, which had been the vent for fluid masses of rock, when such eruptions took place on a larger scale than in more recent times. The smaller cone in the centre of the old crater, corresponding in its size to the diminished forces of volcanic action, is of recent origin, and represents those smaller cones of still active volcanoes which are usually distinguished as cones of eruption, from the original cones, also called the cones of elevation.

We have it on record that about 60 years ago, the crater of the little cone was throwing out showers of red-hot stones of several tons weight and enormous volumes of smoke (Captain Blair's account, *Asiatic Researches*, 1795), and but for the isolated position of the volcano preventing its more frequent observation, we should doubtless be able to fix the date of the erup-

tion that left the stream of lava behind, which is now filling the valley and its outlet into the sea. Since that time it has entered the period of decline of volcanic activity, without, however, leaving us the assurance that it will not some day revive again.

From barometrical observations, I deduced the height of the cone by Gauss's formula, allowing for the time of the day and the influence of the hot ground near the summit, to be about 980 feet, from the level of the sea to the northern edge of the crater. This height is confirmed by a trigonometrical measurement of Lieutenant Heathcote, I. N., to whom I am indebted for the communication of his results. He visited the Island about four months earlier than we did, when he found the height of the cone 975 feet about the level of the sea, and the diameter of the Island : 970 yards, 1.68 miles North and South.

The few notes I could glean respecting the recent history of the Island, are derived from the Island itself, from the records of the Asiatic Society, and from Horsburgh. We found on a rock in the transverse valley the inscription, "Galathea 1846," showing that since then no alteration has taken place. The same conclusion can be extended farther back to the year 1831 or 1832, judging from an account communicated to the Asiatic Society (*Asiatic Society's Journal*, April 1832) by Dr. J. Adam, whose informant landed in the month of March and reached the base of the cone. By this explicit account, the descriptions of the Island in "Lyell,"* dated 1843, and in Humboldt's *Cosmos*, both apparently derived from the same source, must be rectified. The narrator states (in "Lyell") that the sea filled the circular valley round the cone.

Horsburgh states that in 1803, the volcano was observed to explode regularly every 10 minutes, projecting each time a column of black smoke, perpendicularly, to a great height, "and in the night a fire of considerable size continued to burn on the east side of the crater, which was then in view."

The oldest account on record is that of Captain Blair, already quoted, taken from his report of the survey of the Andaman Islands. He must have visited the Island about 1790, as far as I am able to conclude from the publication in the researches and the date of his chart of the Andamans, which is 1790. He approached nearly to the base of the cone, which he describes as the lowest part of the Island, very little higher than the level of the sea, but he does not mention the black stream of lava. The acclivity of the cone he states to be 32° 17', and its height 1,800 feet nearly, which, says he, is also the elevation of the other parts of the Island. On the other hand, he remarks that the cone is visible in clear weather at a distance of twelve leagues, which would require a height of not more than from 900 to 1,000 feet. I think there-

* Lyell's Principles of Geology.

fore that Captain Blair could have taken no accurate measurements, contenting himself with a rough estimate. If it could be proved otherwise, the Island would have subsided 820 feet since he visited it.

From the description in some of these accounts it would appear that the high vegetation which we found on the external slope of the Island, is of quite recent origin.

Mr. Adam's authority (1831) states as follows :

"The summits to the N. E. were completely smooth and covered with ashes ; those to the S. W. although partly covered with ashes, also have a good many small shrubs over them, with dry and parched grass growing on the surface."

He conjectures from this that the eruptions would take place only in the S. W. Monsoon or rainy season, at which time the S. W. wind would blow the dust and ashes on the hills in the opposite direction, or N. E. ; such a conjecture is hardly admissible on the ground given, it being easier to account for the vegetation on the south-western slope by its angle of descent being much smaller than that of the north-eastern slope.

The sulphur on the top of the cone occurs in such quantity in the cracks and fissures, often lining them to the thickness of more than half an inch, that the question naturally arises, whether the sulphur could not be worked with advantage.

Although in the immediate neighbourhood of the crater, where the fissures are numerous, the ground seems to be completely penetrated with sulphur, this is not so evident in other parts, only a few feet lower, where the surface is unbroken. There are, however, some reasons which seem to promise that a search might be successful. In eruptive cones, like that of Barren Island, there is always a central tube, or passage, connecting the vent in the crater with the heart of volcanic action in the interior. In this tube the sulphur, generally in combination with hydrogen, rises in company with the watery vapour, and is partly deposited in the fissures and interstices of the earth near the vent, the remainder escaping through the apertures.

If in the present case we admit the sensible heat of the ground of the upper third of the cone to be principally due to the condensation of steam, a process of which we have abundant evidence in the stream of hot water rushing out from underneath the cold lava, it is not improbable that the whole of the upper part of the interior of the cone is intersected with spaces and fissures filled with steam and sulphurous vapour, these being sufficiently near the surface to permit the heat to penetrate. It is therefore not unlikely that at a moderate depth we should find sulphur saturating the volcanic sand that covers the outside of the cone.

I only speak of the outside, as we may conclude from the evidence we have

in the rocks of lava in the crater and those bulging out on the side, that the structure of the cone is supported by solid rock nearly to its summit, the ashes covering it only superficially.

From what has been said above, the probability of sulphur being found near the surface disposed in such a way as to allow of its being profitably exhausted, will depend on the following conditions :

First.—That the communication of the central canal, through which the vapours rise, with its outlets, be effected not through a few large, but through many and smaller passages distributed throughout the thickness of the upper part of the cone.

Second.—That some of these passages communicate with the loose cover of ashes and stones which envelopes the rocky support of the cone.

Although I have mentioned some facts which seem to indicate the existence of such favorable conditions, and which are moreover strengthened by an observation by Captain Campbell, who saw vapour issuing, and sulphur being deposited near a rocky shoulder about two-thirds of the height, on the eastern descent of the cone, still their presence can only be ascertained satisfactorily by experimental digging.

The Solfatara at Puzuoli, near Naples, is a similar instance of the production of sulphur. It is a crater in which exhalations of watery vapour, sulphurous acid and hydrochloric acid take place, and where sulphur is also deposited. The sulphur is gained there by distilling it out of the sand of the crater, to a depth of 10 metres or 32 feet—it becomes too hot lower down—and returning the sand, which after 25 or 30 years is again charged with sulphur. The permanency of the volcano of Barren Island as a source of sulphur would depend on the rapidity with which the sulphur would be replaced after the sand had been once exhausted. The time required for this is not necessarily fixed to periods of 25 or 30 years. In Iceland, at a similar spot, the sulphur is renewed every two or three years.

If a preliminary experiment should make it appear advantageous to work the cone regularly, the material about the apex, after being exhausted of the sulphur that is present, could by blasting and other operations be disposed in such a way as to direct the jets of vapour in the most convenient manner through uncharged portions of ground. If the sulphur should aggregate in periods of not too long duration, it would be possible to carry on the work of filling up new ground on one side, and taking away saturated earth on the other at the same time, so that after working round the whole circumference, the earth that had been first put on, would be ready to be taken away.

If the periods should prove too long to allow the work permanently to be carried on, an interval of time might be allowed to pass, before resuming operations.

Water for the labourers could always be obtained from the warm spring at the entrance of the Island.

The distilling or melting of sulphur to separate it from adherent earth is a matter of comparatively little expense or trouble. If the sulphur be abundant, it might be effected as in Sicily by using a part of it as fuel. It is not necessary to do it on the spot ; it might be done at any place where bricks and fuel are cheap.

It is impossible to predict certain and lasting success to an undertaking of this kind, all depending on the quantity of sulphur present and the rapidity with which it will be replaced.

The situation of Barren Island offers every facility for a preliminary trial. The near proximity of the Andamans insures a supply of convict labour, timber, bricks, and lime. All the wood and iron work required for facilitating the transport of loads, up and down the hill, could be made on the Andamans.

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